#### STATE OF INDIANA INDIANA UTILITY REGULATORY COMMISSION

PETITION OF THE BOARD OF DIRECTORS FOR UTILITIES OF THE DEPARTMENT OF PUBLIC UTILITIES OF THE CITY OF INDIANAPOLIS, AS SUCCESSOR TRUSTEE OF A PUBLIC CHARITABLE TRUST, D/B/A CITIZENS GAS & COKE UTILITY FOR	) ) ) )	FILED March 01, 2012 INDIANA UTILITY REGULATORY COMMISSION
AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR GAS UTILITY SERVICE AND FOR APPROVAL OF A NEW SCHEDULE OF RATES AND CHARGES APPLICABLE THERETO, APPROVAL UNDER IC 8-1-2.5 OF AN ALTERNATIVE REGULATORY PLAN	) ) C ) )	AUSE NO. 42767
ALTERNATIVE REGULATORY FLAN IMPLEMENTING AN UNCOLLECTIBLE EXPENSE ADJUSTMENT MECHANISM, A DEMAND SIDE MANAGEMENT AND RATE DECOUPLING MECHANISM AND APPROVAL OF OTHER CHANGES TO ITS GENERAL TERMS AND CONDITIONS FOR GAS SERVICE	) ) ) ) )	

#### SUBMISSION OF ANNUAL ENERGY EFFICIENCY YEAR END REPORTS

Pursuant to the Commission's May 24, 2011 Docket Entry in this Cause, the Board of Directors for Utilities of the Department of Public Utilities of the City of Indianapolis, as successor trustee of a public charitable trust, d/b/a Citizens Gas, hereby submits the Citizens Gas annual energy efficiency year end reports attached hereto.

Respectfully submitted,

/s/ Korlon L. Kilpatrick II Korlon L. Kilpatrick II

Korlon L. Kilpatrick II Manager, Rates & Business Applications Citizens Energy Group 2020 N. Meridian St. Indianapolis, IN 46202 Telephone/Fax: 317-927-4592 E-mail: <u>kkilpatrick@citizensenergygroup.com</u>

#### **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing "Submission of Annual Energy Efficiency

Year End Reports" was served upon the Office of the Utility Consumer Counselor via electronic

mail on March 1, 2012 to the following:

Leja D. Courter Office of the Utility Consumer Counselor 115 West Washington Street Suite 1500 South Indianapolis, IN 46204 <u>lcourter@oucc.in.gov</u> <u>infomgt@oucc.in.gov</u>

> <u>/s/ Michael E. Allen</u> Michael E. Allen (Attorney No. 20768-49) Attorney for Petitioner, Citizens Gas

Michael E. Allen (Attorney No. 20768-49) Citizens Gas 2020 N. Meridian St. Indianapolis, IN 46202 Telephone/Fax: 317-927-4318 E-mail: mallen@citizensenergygroup.com Citizens Gas Natural Gas DSM Program Final Report Program Year 3



# Prepared by Wisconsin Energy Conservation Corporation

December 26, 2011

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## **Executive Summary**

In 2008, natural gas prices were at an all-time high, and Citizens Gas had filed and received approval from the Indiana Utility Regulatory Commission (IURC) to quickly implement programs to immediately begin helping customers manage their energy costs. Citizens Gas hired WECC in August 2008 to administer the Prescriptive and Custom programs, Multifamily, Existing Home Retrofit programs, and, later, the Low-income Weatherization program. Citizens Gas is the portfolio administrator responsible for Customer Outreach and Education and the Elementary Education programs and has worked with the National Energy Foundation (NEF) to provide an Elementary Education program in coordination with IPL.

- Program Year 1 (September 1, 2008 to August 31, 2009) was successful: The 1,128,395 estimated net therms energy savings achieved through WECC-administered programs and the additional 147,737 estimated net therm savings through the Elementary Education program exceeded the planning goal by 40%.
- Program Year 2 (September 1, 2009 to August 31, 2010) was very successful. WECCadministered programs achieved an estimated 1,442,157 net therms (107% of the revised goal) for \$2,467,557 (84% of the revised budget). All programs combined achieved an estimated 1,744,243 net therms, or 114% of goal for a Total Resource Cost ratio of 3.1.
- Program Year 3 (September 1, 2010 to August 31, 2011) brought several new challenges and opportunities for the Program, which are noted below.
  - An expiration of the ARRA-funded tax incentives and the DOE-funded Indiana Heating Incentive Program (IHIP).
  - A stabilization of avoided natural gas prices compared to Program Year 2, which followed a 22% decline compared to Program Year 1.
  - A continuation of a high unemployment and slow economic growth.

The Program Year 3 Operating Plan included several notable changes from Program Year 2, including:

- The elimination of the Home Retrofit program due to budget constraints.
- The removal of the ENERGY STAR<sup>®</sup> labeling of programmable thermostats offerings due to the EPA no longer having an ENERGY STAR product, along with the addition of .67 EF water heaters.
- The addition of the Retrofit Ramp-up program where Citizens Gas funding provides additional support to the Better Buildings Department of Energy (DOE) grant programs also known as the Eco House Project with the Indianapolis Neighborhood Partnership (INHP) and the Sweeps program managed by the City of Indianapolis. The DOE program funding was secured by the City of Indianapolis.
- The launch of joint programs with IPL (Residential New Construction, Commercial and Industrial Custom, Multi Family Direct Install Residential Low

Income Weatherization and Residential Online Assessment with Kit). Also note that Citizens Gas and IPL jointly administer an Elementary Energy Education program.

- There were also two Amendments to the Operating Plan. Details regarding both Amendments can be found on page 6 in the Table titled, "Program Year 3 Summary: Original, Revised, and Actual Budget and Net Therm Savings."
  - Amendment A was submitted to the Oversight Board on June 3, 2011. Amendment A included the addition of 420,377 net therms (a 29% increase for the WECC-administered programs) and an increase in planned expenditures of \$468,921 (an 18% increase for the WECC-administered programs). The purpose of Amendment A was to develop a plan to cost-effectively use unallocated carryover funds from Program Year 2. Increases in budget and net therm savings goals were made to the Residential Prescriptive, Residential Low Income Weatherization, Residential Online Assessment with Kit, and General Service Prescriptive programs. A minor adjustment to the budget for the Citizens Gas administered Consumer Education program was also made. Finally, a Multi Family Efficient Equipment pilot program was added.
  - Amendment B was submitted to the Oversight Board for approval on July 28, 2011. Amendment B included the addition of 596,893 net therms (32% vs. Amendment A) and a budget increase of \$476,128 (14% vs. Amendment A). The purpose of Amendment B was to adjust program budgets considering the year-end forecast and to allocate unused carryover funds. Increases in budgets and net therm savings goals were made to the Residential Low Income Weatherization, Multi Family Direct Install, Online Assessment with Kit, and Custom programs. Net therm savings goals were established for the Citizens Gas administered programs of Elementary Education and Low Income Working Poor programs.

Overall, the portfolio achieved net savings of 2.03<sup>1</sup> million therms which:

- Exceeded the original net therm planning goal of 1.735<sup>1</sup> million.
- Exceeded the PY2 estimated net therm savings of 1.74<sup>1</sup> million by nearly 200,000 therms.
- Was less than the revised planning goal of 2.46<sup>1</sup> million net therms (including Amendments A and B).

<sup>&</sup>lt;sup>1</sup> Includes savings from Citizens Gas administered programs (Elementary Education and Low Income Working Poor) which had not yet been included in the Operating Plan when it was initially completed. Does not include increased therm savings goal for online kits which was increased after Operating Plan was issued.

The following programs exceeded their original net therm saving goal: Residential and General Service Prescriptive, Residential Low Income Weatherization, Multi Family Direct Install, and Residential Online Assessment with kit.

From an expense perspective, the program invested \$2,817,722 in efficiency programs, which was less than the total budget (including Amendment A and B) of \$3,961,669.

The portfolio overall was highly cost effective, delivering over \$4 million in net benefits at a TRC of 2.6. The overall benefit cost results are notably better when compared to the operating plan values of \$1.87 million in net benefits and a TRC of 1.7. At an individual program level, these observations are noted:

- Programs that had participation were solidly cost-effective, generally better than planned, except Low Income Weatherization and New Construction.
- The individual certification levels for the New Construction program were costeffective, but the joint program overall had a BC of 0.9.
- Marketing and implementation costs were each about one-third of the CG budget for the program.
- While the Residential Prescriptive program is cost-effective overall, water heaters are not. Additional research should be considered to more accurately assess the longer term viability of this measure.

# Program Year 3 Portfolio Summary (Includes Amendments A&B)

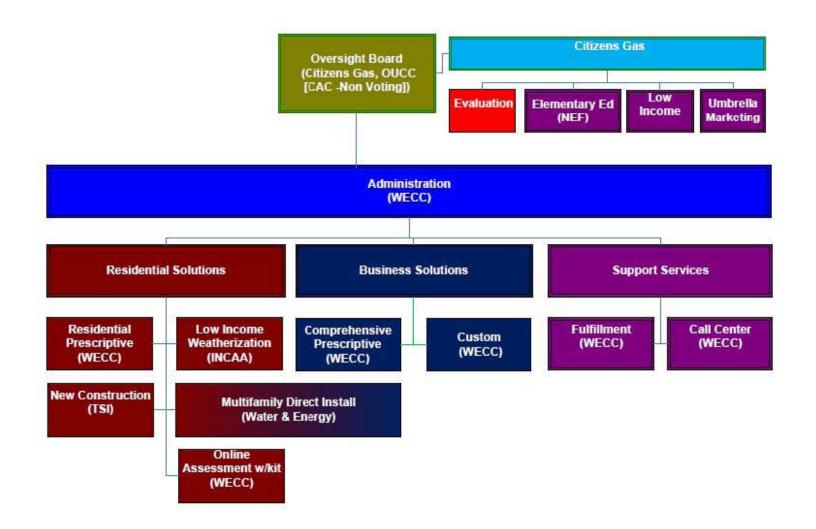
Program	Program Budget	Actua Speno		Remaining	Actual Gross Savings (Therms)	Planned Net Savings (Therms)	Est. Actual Net Savings (Therms)	Planned TRC B/C	TRC B/C	Utilit B/C		Net Benefit	% Budge
Residential Prescriptive	\$ 812,070	\$ 648,	628	\$ 163,442	271,623	163,637	152,357	1.3	1.3		1.9		24%
Residential New Construction	\$ 61,093	\$ 41,	362	\$ 19,731	8,099	8,495	6,345	1.3	0.9	3 8	1.4	\$ (22,949)	
Residential Low Income Wx	\$ 304,455	\$ 333,	308	\$ (28,853)	29,500	35,990	29,500	1.1	0.9		0.8	\$ (46,253)	12%
Multifamily Direct Install	\$ 307,685	\$ 248,	524	\$ 59,161	608,550	630,740	608,550	5.6	6.2	2 8	6.2	\$ 3,816,051	9%
Multifamily Efficiency Equipment Pilot	\$ 117,000	\$	700	\$ 116,300	0	47,300	0			8 - 58		\$ (700)	0%
Residential Online Assessment w/Kit	\$ 131,951	\$ 67,	354	\$ 64,097	255,528	283,608	204,422	6.0	7.1		6.7	\$ 1,392,262	2%
Better Buildings	\$ 220,000	\$ 4,	162	\$ 215,838	0	61,550	0	1.3				\$ (5,332)	0%
General Service Prescriptive	\$ 410,058	\$ 333,	787	\$ 76,271	694,972	627,383	555,718	4.0	5.3	0 0	9.2	\$ 2,958,059	12%
Commercial Custom	\$ 511,962	\$ 245,	656	\$ 266,306	244,749	312,222	183,562	1.8	1.8		6.7		9%
Program Admin	\$ 398,815	\$ 170,	904	\$ 227,911	1				3	3 8		5	69
	\$ 3,275,089	\$ 2.094.		\$ 1,180,204	2,113,021	2,170,925	1,740,454						76%
Consumer Education Elementary Education Low Income/Working Poor Weatherization Evaluation Unallocated	<ul> <li>\$ 287,953</li> <li>\$ 125,000</li> <li>\$ 165,000</li> <li>\$ 120,000</li> </ul>		950 465 191	\$ 24,389 \$ (950) \$ (465) \$ 14,809 \$ 31,076	- 287,272 6,785	- 287,272 6,785	- 287,272 6,785		2.9 0.6		2.7 0.6		109 59 69 49 09
Sub Total	\$ 697,953		· · · · · · · · · · · · · · · · · · ·	\$ 68,859	287,272	287,272	287,272	8	8	2 8	-	8	249
	\$ 3,973,042			\$ 1,249,063	2,400,293	2,458,197	2,027,726	č.	52	0 0	1	\$ -	100%
Total B/C for Citizens Gas Only Programs Total for B/C for CG/IPL Joint Programs (*)								2.1 2.6	2.6 2.6		3.5 4.6	\$ 4,076,093 \$7,128,339	
* indicates joint programs with IPL			11										
**Shown for informational purposes only													
Remaining Carry Over Funds													
Program Year 2			- 32	\$449,013.00									
Program Year 3				\$800,050.00									
Total 🏧				\$1,249,063.00									

Citizen Gas Program Year 3 Program	ı Pr B	Orig. ogram udget	Constant State	Revised Program Budget Amend. A)	1 (4	Revised Program Budget Amend. A & B)		Actual Spend	Orig. Planned Net Savings (Therms)	Revised Planned Net Savings (Therms) (Amend. A)	Revised Planned Net Savings (Therms) (Amend. A & B)	Est. Actual Net Savings (Therms)
Residential Prescriptive	\$	712,070	\$	812,070	\$	812,070			144,512	163,637	163,637	152,357
* Residential New Construction	\$	61,093	\$	61,093	\$	61,093	-	41,362	8,495	8,495	8,495	6,345
* Residential Low Income Wx		210,000	\$	260,001	\$	304,455		333,308	25,665	31,565	35,990	29,500
* Multifamily Direct Install	\$	198,585	\$	198,585	\$	307,685		248,524	413,240	413,240	630,740	608,550
Multifamily Efficiency Equipment Pilot			\$	110,500	\$	117,000	\$			47,300	47,300	0
* Residential Online Assessment w/Kit	\$	82,532	\$	120,951	\$	131,951	\$	67,854	62,208	240,408	283,608	204,422
Better Buildings	\$ 3	200,000	\$	220,000	\$	220,000	\$	4,162	31,100	61,550	61,550	0
General Service Prescriptive	\$ 3	260,058	\$	410,058	\$	410,058	\$	333,787	443,485	582,887	627,383	555,718
* Commercial Custom		511,961	\$	511 962	\$	511,962		245,656	312,222	312,222	312,222	183,562
Program Admin	\$ 3	383,741	\$	383,741	\$	398,815	\$	170,904		e tate de	2.54	
Sub Total	\$2,	620,040	\$	3,088,961	\$	3,275,089	\$	2,094,885	1,440,927	1,861,304	2,170,925	1,740,454
Citizens Gas Administered Portfolio**	3 2											
Consumer Education	\$ 3	275,000	\$	276,580	\$	287,953		263,564				105
Elementary Education			Ĵ.		\$	125,000	\$	125,950		·	287,272	287,272
Low Income/Working Poor Weatherization	el Anno		Í.		\$	165,000	\$	165,465			6,785	6,785
Evaluation	\$	120,000	\$	120,000	\$	120,000	\$	105,191			1214	00
Unallocated	3			Statuses - Alexandre			\$	2	<u>1</u>			
Sub Total	\$ 3	395,000	\$	396,580	\$	697,953	\$	660,170			287,272	287,272
Total	\$3,	015,040	\$	3,485,541	\$	3,973,042	\$	2,755,055	1,440,927	1,861,304	2,458,197	2,027,726
* indicates joint programs with IPL **Shown for informational purposes only												

## Program Year 3 Summary: Original, Revised, and Actual Budget and Net Therm Savings

### **Program Year 3 Portfolio Structure**

(September 1, 2010 through August 31, 2011)



## **Residential and General Service Prescriptive Programs**

The Residential and General Service Prescriptive programs provide incentives to residential and general service customers to reduce the incremental cost of energy efficient technologies. The goal is to increase the installation of these technologies above the levels that would take place in the absence of the program. Incentives were designed to influence customer purchasing decisions when either replacing existing equipment at the time of failure, replacing inefficient equipment prior to failure, or for new construction applications. In the midst of Program Year 3, in the Residential Programs, WECC dropped the incentive for .62% efficient storage tank water heaters from \$100 to \$50 as of May 1, 2011 to reflect the lower incremental cost of these units, and also added a \$150 rebate for .67% efficient storage tank water heaters.

The incentives for each technology are listed below in table 1.

Residential Measures	Incentives
Gas Furnace – 92%+ AFUE	\$200
Gas Boiler - 90% + AFUE	\$500
Programmable Thermostat	\$20
Storage Water Heater - 30 gallons>, .62+ EF	\$50
Storage Water Heater - 30 gallons>, .67+ EF	\$150
88% Thermal Efficiency Storage Tank Water Heater	\$150
Tankless Water Heater82 EF	\$150
90% AFUE Boiler	\$500
Commercial Measures	Incentives
Gas Furnace - 92%+ AFUE	\$200
Unit Heaters – 91% Thermal Efficiency or greater	\$200
Programmable Thermostat	\$20
Gas Boiler - 90%+ AFUE ( <u>&lt;</u> 300,000 Btu/Hour)	25% of purchase price, up to
	\$5,000
Gas Boiler - 90%+ Combustion Efficiency, ≥ 300,000 Btu/Hour	25% of purchase price, up to
	\$5,000
Boiler Modulating Burner Control - Minimum 5 to 1 turn-down ratio	25% of purchase price, up to
(retrofit only)	\$5,000
Storage Water Heater - 30 gallons>, .62+ EF	\$50
Low Flow Pre-Rinse Sprayers	\$25
Storage Water Heater Vendor Spiff[1]	\$50
Tankless Water Heater82 EF	\$150
88% Thermal Efficiency Storage Tank Water Heater	\$150
Boiler Reset Control (Retrofit Only)	\$250
Boiler Tune-Up	\$250
Steam Trap / Service Buy Down	\$50

#### Table 1 Residential and Commercial Measures and Incentives

### Mid-year Program Changes

In June of 2011 WECC evaluated the current progress of the Citizens Gas portfolio and made recommendations for mid-year adjustments to the program plan and added \$100,000 for residential prescriptive program and for \$150,000 general service prescriptive program. These budget adjustments were made to accommodate what had been high program participation which was at least in part driven by the tax incentives that expired at the end of 2010. Given the continued soft economy the initial program planning did not forecast as high a level of participation. The adjustments were approved after examining the following factors:

- Review of the current participation relative to the original planned goals.
- Historical monthly market per measure participation in previous program year.
- Potential market factors such as economy and other economic stimulus factors, including the federal economic stimulus incentives.
- Program cost effectiveness.
- Program scalability with minimal impact to customers.

Tables 2 and 3 summarize the adjustment in the incentive budgets and savings and participation goals.

#### Table 2 Changes to Incentive Budgets

Program	Original Budget	Revised Budget	Difference
Residential Prescriptive	\$712,070	\$812,070	\$100,000
General Service Prescriptive	\$260,058	\$410,058	\$150,000

	Measures	Implemented	Budget Ex	penditures	Net Therm	n Savings
Measures	Planning Goal	Revised Planning Participation	Planning Goal	Revised Planning Budget	Planning Goal	Revised Net Savings
	R	esidential Presc	riptive			
92% AFUE Furnace	2,399	2,849	\$479,800	\$569,800	101,985	121,083
	Ger	eral Service Pre	scriptive			
92% AFUE Furnace	51	208	\$10,200	\$41,600	5,483	22,360
Programmable Thermostat	29	266	\$580	\$5,320	551	5,054
.62 EF Water Heater	5	5	\$450	\$450	76	76
.67 EF Water Heater	1	5	\$150	\$150	35	35
.82 EF Water Heater - Tankless	6	40	\$900	\$6,000	374	2,496
90% AFUE Boiler	30	65	\$75,000	\$162,500	61,440	133,120
Boiler Tune -Up	200	225	\$50,000	\$56,250	353,760	397,980
Boiler Mod Burner Cntrl	6	6	\$15,000	\$15,000	5,530	5,530
Boiler Reset Control (Retrofit)	6	8	\$1,500	\$1,500	5,530	5,530
88% TE Water Heater	8	2	\$1,200	\$1,200	3,840	3,840
Steam Trap/Service Buydown	21	21	\$1,050	\$1050	3,410	3,410
Low Flow Pre-Rinse Sprayer	10	10	\$250	\$250	3,456	3,456
Subtotal	476	964	\$156,280	\$291,270	443,485	627,683

#### Table 3 Changes to Participation Goals, Budgets, and Savings Goals by Measure

#### **Residential and Commercial Prescriptive Program Results**

The Citizens Gas Residential Prescriptive Program participation exceeded the original goal achieving 105% of the net therm savings. The revised goal was a bit optimistic and the program achieved 93% of the revised residential participation and savings goal. Similarly, the Commercial Prescriptive Program achieved 125% of the original net therm savings goal and 89% of what was in hindsight an optimistic revised net therm savings goal. Both programs more than achieved the original goal. The actual results for goals, participation, incentives budget and estimated energy savings are presented in the tables 4, 5, and 6 below.

#### **Table 4 Residential Prescriptive Participation Results**

Measures	Program Participation	Original Planning Goal	% to Original Goal	Revised Planning Goal	% to Revised Goal
92% AFUE Furnace	2,421	2,399	101%	2,849	89%
Programmable Thermostat	1,308	1,290	101%	1,290	101%
.62 EF Water Heater	420	800	53%	800	53%
.67 EF Water Heater	11	19	58%	19	58%

Measures	Program Participation	Original Planning Goal	% to Original Goal	Revised Planning Goal	% to Revised Goal
.82 EF Water Heater –					
Tank-less	126	140	90%	140	90%
88% Thermal Efficiency					
Storage Tank Water Heater	0	8	0%	8	0%
90% AFUE Boiler	28	22	127%	17	127%
Vendor SPIFFS	0	72	0%	72	0%
Totals	4,314	4,750	91%	5,200	83%

#### Table 5 Residential Prescriptive Incentives Paid

Measures	Incentives Paid	Original Incentives Budget	% to Original Goal	Planning Goal	% to Goal
92% AFUE Furnace	\$484,200	\$479,800	101%	\$569,800	85%
Programmable Thermostat	\$26,160	\$25,800	101%	\$25,800	101%
.62 EF Water Heater	\$40,150	\$73,850	54%	\$73,850	54%
.67 EF Water Heater	\$1,650	\$2,850	58%	\$2,850	58%
.82 EF Water Heater – Tank-less	\$18,900	\$21,000	90%	\$21,000	90%
88% Thermal Efficiency Storage Tank Water Heater	\$0	\$1,200	0%	\$1,200	0%
90% AFUE Boiler	\$14,000	\$11,000	127%	\$11,000	127%
Vendor SPIFFs	\$0	\$3,600	0%	\$3,600	0%
Totals	\$585,060	\$619,100	95%	\$709,100	88%

#### Table 6 Residential Prescriptive Estimated Therm Savings

Measures	Achieved Est. Gross Therm Savings	Achieved Estimated Net Therm Savings	Original Estimated Net Therm Savings Goal	% to Original Savings Goal	Revised Estimated Net Therm Savings Goal	% to Revised Goal
92% AFUE Furnace	205,785	102,893	101,958	101%	121,083	85%
Programmable Thermostat	45,780	34,997	22,575	155%	22,575	155%

Measures	Achieved Est. Gross Therm Savings	Achieved Estimated Net Therm Savings	Original Estimated Net Therm Savings Goal	% to Original Savings Goal	Revised Estimated Net Therm Savings Goal	% to Revised Goal
.62 EF Water Heater	7,296	5,837	12,160	48%	12,160	48%
.67 EF Water Heater	407	387	668	58%	668	58%
.82 EF Water Heater – Tank- less 1	9,795	6,161	5,460	113%	5,460	113%
88% Thermal Efficiency Storage Tank Water Heater	0	0	512	0%	512	0%
90% AFUE Boiler	1876	1501	1,179	127%	1,179	127%
Totals	270,939	151,776	144,512	105%	163,637	93%

### Commercial (General Service) Prescriptive Results

The continued outreach efforts to mechanical contractors resulted in significant participation and estimated net energy savings for boilers and both boilers and boiler tune-up savings were computed on an individual basis as a custom calculation. The direct installation of pre-rinse spray valves also significantly contributed to the goal attainment for this program. The actual results for goals, participation, incentives budget and estimated energy savings are presented in the tables 7, 8, and 9 below.

#### **Table 7 Commercial Prescriptive Program Participation Results**

Measures	Program Participation	Original Goal	% to Original Goal	Revised Goal	% to Revised Goal
92% AFUE Furnace	110	51	216%	208	53%
Programmable Thermostat	181	29	624%	266	68%
.62 EF Water Heater	0	5	0%	5	0%
.82 EF Water Heater – Tankless	0	1	0%	1	0%
88% TE Water Heater	21	6	350%	40	53%
90% AFUE Boiler	41	30	137%	65	63%
Boiler Tune -Up	58	200	29%	225	26%
Boiler Mod Burner Control (5:1)	8	6	133%	6	133%
Boiler Reset Control (Retrofit)	0	6	0%	6	0%
91% EF Unit Heaters	4	8	50%	8	50%

Steam Trap/Service Buy- down	26	21	124%	21	124%
Low Flow Pre-Rinse Sprayer	104	113	92%	113	92%
Totals	553	476	116%	964	57%

### Table 8 Commercial Prescriptive Incentives Paid

	Incontinuo	Original	% to	Revised	% to
Maaaar	Incentives	Incentives	Original	Incentives	Revised
Measures	Paid	Budget	Goal	Budget	Goal
92% AFUE Furnace	\$22,000	\$10,200	216%	\$41,600	53%
Programmable Thermostat	\$3,620	\$580	624%	\$5,720	63%
.62 EF Water Heater	\$0	\$450	0%	\$450	0%
.67 EF Water Heater	\$0	\$150	0%	\$150	0%
.82 EF Water Heater -	\$3,150	\$900	350%	\$6,000	53%
Tankless					
90% AFUE Boiler	\$198,850	\$75,000	265%	\$162,500	122%
Boiler Tune -Up	\$14,500	\$50,000	29%	\$56,250	26%
Boiler Mod Burner Cntrl	\$15,075	\$15,000	101%	\$15,000	101%
Boiler Reset Control	\$0	\$1,500	0%	\$1,500	0%
(Retrofit)					
88% TE Water Heater	\$600	\$1,200	50%	\$1,200	50%
Steam Trap/Service	\$1,300	\$1,050	124%	\$1,050	124%
Buydown					
Low Flow Pre-Rinse Sprayer	\$4,854	\$250	1942%	\$5,079	96%
Subtotal	\$263,949	\$156,280	169%	\$296,499	89%

### Table 9 Commercial Prescriptive Estimated Therm Savings

	Est. Gross Therms	Est. Net Therm Savings	Est. Original Net Therm Savings	% to Original	Revised Est. Net Therm Savings	% to Revised
Measures	Achieved	Achieved	Goal	Goal	Goal	Goal
92% AFUE Furnace	23,650	11,826	5,483	216%	22,360	53%
Programmable Thermostat	6,878	3,439	551	624%	5,054	68%
.62 EF Water Heater	-	-	76	0%	76	0%
.82 EF Water Heater – Tankless	-	-	35	0%	35	0%
88% TE Water Heater	1,638	1,310	374	350%	2,496	52%
90% AFUE Boiler	330,807	264,645	61,440	431%	133,120	199%
Boiler Tune -Up	234,034	187,227	353,760	53%	397,980	47%
Boiler Mod Burner Control (5:1)	45,360	36,288	5,530	656%	5,530	656%
Boiler Reset Control	_	_	5,530	0%	5,530	0%

(Retrofit)						
91% EF Unit Heaters	2,400	1,920	3,840	50%	3,840	50%
Steam Trap/Service Buy- down	5,278	4,222	3,410	124%	3,410	124%
Low Flow Pre-Rinse Sprayer	44,928	44,842	3,456	1298%	47,952	94%
Totals	694,973	555,719	443,485	125%	627,383	89%

### **Changes for Program Year 4**

WECC recognizes that some of the measures in the General Service (Commercial) Prescriptive program have not received the traction expected in the marketplace. We will continue to enhance our partnership between WECC's field outreach team and the Citizens Gas Consultants to better serve the marketplace and these programs. WECC continues its efforts to recruit and train non-participating contractors and dealers to increase participation and attribution.

## **Residential New Construction**

Residential New Construction program for Citizens Gas works with builders and qualified Home Energy Raters to build homes for Citizen Gas' customers that are, more comfortable, more durable, and more energy efficient than homes built to conventional practices. All home certifications go through a third party verification process, ensuring the construction meets the high standard of the programs. The goals of the program are to meet the demands of Indiana's climate, push the levels of energy efficiency of Indiana's residential building standards, and facilitate builder participation by adding value to their business. The program provides financial incentives for builders as a means to not only promote energy efficient new construction, but also accelerate the adoption of new technologies. The program focuses on building shell and HVAC-related gas saving opportunities in new homes.

For Program Year 3, Citizens Gas and IPL joined forces to offer a combined gas and electric new construction program due to overlapping service territories. For homes with gas space heating, water heating and central air conditioning, Citizens Gas provided 95% of the rebate and IPL provided 5% of the rebate. High efficiency furnaces and water heaters are required for gas-heated homes. For homes that are all electric, IPL provided 100% of the rebate and the prescriptive rebate for heat pumps and central air conditioners and heat pump water heaters. ENERGY STAR Version 3 rebates are provided by both utilities based on the space heating and water heating systems in the home.

The program team included Thermo-Scan Inspections Inc. (TSI). TSI is subcontracted by WECC to provide technical assistance and develop training for builders, building trades, and realtors to raise awareness about the benefits of energy efficient new home construction. Also, TSI provides the rating service which is required to determine the Home Energy Rating System index (HERS) level.

The actual participation, incentives, and therm savings are presented in Table 10, Table 11, and Table 12. The program fell short by 2 homes for both of the HERS level goals. Due to the extensive requirements and additional cost of ENERGY STAR Version 3 certification, none were achieved. New residential construction continues to struggle due to the national economic situation.

Measures	Program Participation	Goal	% to Goal
<=70 ES Certified Index Gas Heat	1	15	87%
<=70 ES Certified Index (Joint Program)	12	15	0770
>70 and <= 85 ES Certified Index Gas Heat	0	15	87%
>70 and <= 85 ES Certified Index (Joint Program)	13	15	0770
ENERGY STAR Version 3.0	0	4	0%
Total	26	34	76%

#### Table 10 New Construction Program Participation Results

#### Table 11 New Construction Program Incentives Paid

Measures	Incentives Paid	Incentive Budget	% to Goal
<=70 ES Certified Index Gas Heat	\$750	\$10,688	87%
<=70 ES Certified Index (Joint Program)	\$8,550	φ10,000	01%
>70 and <= 85 ES Certified Index Gas Heat	\$0	\$7,125	87%
>70 and <= 85 ES Certified Index (Joint Program)	\$6,175	φ7,125	01%
ENERGY STAR Version 3.0	\$0	\$2,850	0%
Total	\$15,475	\$20,663	75%

#### Table 12 New Construction Program Estimated Therm Savings

Measures	Gross Therms Savings	Net Therm Savings	Net Therm Savings Goal	% to Goal
<=70 ES Certified Index Gas Heat	416	333	4,992	87%
<=70 ES Certified Index (Joint Program)	4,992	3,994	4,332	07 /0
>70 and <= 85 ES Certified Index Gas Heat	0	0	0 000	87%
>70 and <= 85 ES Certified Index (Joint Program)	2,691	2,018	2,329	01 %
ENERGY STAR Version 3.0	0	0	1,174	0%
Total	8,099	6,345	8,495	75%

### Marketing Plan

The program was marketed to builders primarily through the Indiana Builders Association as well as direct business-to-business contacts. WECC and TSI worked with Citizens Gas/IPL Business Managers to identify key builders and conduct in-person meetings to recruit the builders into the program. Throughout the program year TSI staff developed opportunities to present the program at builder and other trade association meetings, and to place information in association newsletters. A dedicated program webpage served as a source for program information and application forms for rebates.

Participating builders were supplied with collateral materials to aid them in communicating the benefits of ENERGY STAR homes to their customers. Due to the extensive changes and increased cost in the ENERGY STAR homes program, going from Version 2 to Version 2.5 to Version 3.0, and the postponing of implementation, it was difficult to keep builders interested because of the changes.

## **General Service Custom Program**

The General Service Custom program addresses projects that fall outside of the scope of the General Service Prescriptive program. It is designed to motivate trade allies and customers to implement energy efficient measures, and use higher efficiency technologies than would have without the program. The Custom program requires pre-approval prior to purchasing or installing equipment; it is available to Citizens Gas General Service customers on rate codes D3 and D4.

Example custom projects include:

- Heat recovery projects
- HVAC or DHW system control projects
- Outside air control
- Air rotation units
- De-stratification fans
- Constant to variable air volume systems
- Infrared heaters
- Building envelope improvements

The General Service Custom Program incentive levels are based on the following criteria:

- Maximum project incentive payment not to exceed \$25,000
- Incentive may not exceed 50% of the incremental cost of the project
- Incentive may not exceed 30% of the total project cost
- If the simple payback for the project is less than 1.5 years before the incentive, the project does not qualify. Incentives are offered to reduce the payback period down to no less than 1.5 years.

WECC outreach efforts were focused on networking with Citizens Gas Commercial Sales Consultants, product sales representatives, service contractors, and energy services companies. These efforts were performed by Trade Ally Service Representatives who recruited participants for the custom program provided sales assistance, and presented at trade seminars.

### General Service Custom Marketing Plan

Trade Ally Service Representatives continue to promote the program at industry events, contractor association meetings, and directly to trade allies. Some examples of events attended in the past program year include: The Midwest Healthcare Engineering Conference, the Indiana Building Green Symposium, and the Midwest Petroleum and Convenience Show, along with monthly meetings with industry trades. In addition to attending and presenting at these seminars, WECC also hosted an ASHRAE seminar for Trade Allies jointly with Indianapolis Power and Light this year. The seminar had 30 attendees and WECC's Trade Ally Service Representatives distributed marketing material to provide awareness of the Custom program and presented the Custom program to the group. Some examples of marketing material distributed to trade allies and customers include: a tri-fold brochure. Business Custom Program Overview form, and a program process checklist. The General Service Custom program was also marketed on the Citizens Gas Energy Savers website. As in previous years, WECC staff members continue to work with Citizens Gas Commercial Sales Consultants to generate referrals to the program.

#### General Service Custom Results

The program achieved 37% of the program's participation goal, 59% of the therm savings goal, and used 49% of the incentives budget. The project pipeline included nineteen (19) projects that will complete in Program Year 4. The feedback received from the awareness meetings and project-specific meetings with Citizens Gas staff, trade allies and end-use customers continues to be positive. The tables below show detail on the program results.

Table 13 Commercial C	Custom Program	Participation Results

Measures	Program Participation	Goal	% to Goal
Projects < 7,500 Therms	2	14	14%
Projects >7,500 Therms	12	24	50%
Totals	14	38	37%

#### **Table 14 Commercial Custom Program Incentives Paid**

Measures	Incentives Paid	Incentives Budget	% to Goal
Projects < 7,500 Therms	\$2,944	\$26,068	11%
Projects > 7,500 Therms	\$179,530	\$346,392	52%
Totals	\$182,474	\$372,460	49%

#### Table 15 Commercial Custom Program Estimated Therm Savings

Measures	Est. Gross Therm Savings Achieved	Est. Net Therm Savings Achieved	Est. Net Therm Savings Goal	% to Goal
Projects < 7,500 Therms	3,925	2,944	26,166	11%
Projects >7,500 Therms	240,824	180,618	286,056	63%
Totals	244,749	183,562	312,222	59%

## Changes for Program Year 4

There are no changes planned for this program in Program Year 4.

## **Residential Low Income Program**

The Residential Low Income Program, originally implemented in the Citizens Gas Program Year 1, was designed to provide resources to customers that could not afford to install the energy efficient measures necessary to save energy and assist in lowering energy bills. The initial program goal was to deliver weatherization services to electric and gas heated homes for total of 108 homes from September 2010 to August 2011. Due to the impending roll out of the state-wide electric Third Party Administrator (TPA) the goal was to completely weatherize 21 electric heated homes prior to December 31 2010. WECC worked with the Indiana Housing and Community Development Authority (IHCDA), the Indiana Community Action Association (INCAA) to deliver these services while leveraging funding from IPL and the American Recovery and Reinvestment Act (ARRA).

The original goals and the funding for the program were low due to the available funding from Citizens Gas and IPL at the start of the program year was small to account for the expectation that additional funding could be made available. When it was determined that the roll out of the state-wide electric Third Party Administrator (TPA) was going to be delayed IPL provided an additional \$550,000 to complete an additional 75 all electric homes at \$5,000 per home and contribute an additional \$2,000 per home for electric measures to the 69 homes that previously received gas measures. This increased the overall total number of homes to 183 to be completed by December 31, 2011. In June 2011, Citizens Gas provided an additional \$50.000 to complete an additional 10 low income homes. This brought the total gas goal to 97 homes and the budget to \$260,000. In July, Citizens Gas provided an additional \$44,455 to complete a total of 122 gas homes (25 additional homes) bringing the total budget to \$304,455. The IHCDA offered an extension to our original IHCDA contract of \$300,000 to complete (25 additional homes) brining the IHCDA goal to 143 homes vs. our original goal of 108 homes November 30, 2011. This will increase the overall total number of homes to 268 (combined goal of IHCDA, Citizens Gas and IPL) to be completed by December 31, 2011 with 146 of those homes to be electric and 122 homes to be natural gas.

While the funding for IPL and IHCDA will terminate prior to the end of Citizens Gas Program Year 4, the current plan is to share the weatherization costs as appropriate across all three funding sources until the IPL and IHCDA funding is fully used. This will allow the dollars for all parties to be stretched farther and will increase the number of low income homes to receive services.

#### **Residential Low Income Program Results**

The goal for Program Year 3 was to complete weatherization services for 122 gas homes. Program Year 3 results for the Citizens Gas portion of the program are presented in the table below, which shows that deemed savings of 295 therms per home were used to estimate the gross and net savings per home for this program. The assumption was based on the agreedupon therm savings used in the Program Year 3 Operating Plan. The total program therm savings for the Citizens Gas portion of the homes completed totaled 29,500 therms. Participants in this program would not have been able to afford these services without the program. Therefore, there is no free-ridership estimated for this program.

Measures	Program Participation	Goal	% to Goal	Incentives Paid	Incentive Budget	% to Original Goal	Est. Net Therm Savings Achieved	Est. Net Therm Savings Goal	% to Original Goal
Homes Weatherized	100	122	82%	\$297,324	\$307,685	96%	29,500	35,990	82%

Table 16 Low Income Weatherization Results

The program had identified 122 gas heated homes that were in various stages of the weatherization process but only completed 100 homes within the program year. The anticipated shortfall was communicated to the Oversight Board before the Program Year was concluded as with Program Years 1 and 2, the ARRA funding and the IPL funding are available and cross-over the Citizens Gas program years.

While the funding for IPL and IHCDA will terminate prior to the end of Program Year 4, the current plan is to share the weatherization costs as appropriate across all three funding sources until the IPL and IHCDA funding terminates. This will allow the Citizens Gas dollars to be stretched farther and will increase the ability of Citizens Gas to do more homes then is currently forecasted in the Program Year 4 plan. Once the IPL and IHCDA funding terminates the goals and energy savings for the program plan will be revised and shared with the Oversight Board.

## **Multifamily Direct Install Program**

The Multifamily Direct Install program targets multifamily complexes with units that are both individually metered (residential ratepayers) and master metered (commercial ratepayers). Each unit must have a natural gas-fueled storage water heater to qualify. This program was implemented as a joint program with IPL. Recruitment targets property-management companies as well as property owners to secure agreements to treat multiple properties through a single point of contact. To provide additional value, the program promoted boiler tune-ups and steam trap replacement services to the maintenance or facility managers of master metered properties.

The program promotes the installation of energy-efficient, high-performance water fixtures (i.e., showerheads and faucet aerators) in rental units, condominiums, and mobile homes to substantially reduce hot water consumption. The program educates tenants about low-cost measures and behaviors that will have a lasting impact on their energy and water consumption.

A direct install program of this type requires no investment by the customer, and therefore is immune to decreases in discretionary spending. Further, program volume can be increased or decreased depending on the performance and budget needs of other programs.

WECC contracted with Thermo-Scan Inspections (TSI) and Water and Energy Solutions (WES) to implement the program. Their installation rates were aggressively negotiated.

### Multifamily Direct Install Program Marketing

The program was marketed directly to property managers and building owners during the program year. Advertising was done in the Apartment Guide and cold calling of apartment management companies was also part of the marketing strategy.

### Multifamily Direct Install Program Results

The program delivered services to 8,114 units and exceeded the program goal for the year. However, the overall program achieved only 96% of its therm savings goal due to the lack of participation in the boiler tune up and steam trap replacement measures.

Measures	Program Participation	Goal	% to Goal	Incentives Paid	Incentive Budget	% to goal	Therm Savings Achieved	Therm Savings goal	% to goal
MF Direct Install	8,114	7,900	103%	\$238,407	\$262,400	91%	608,550	592,500	103%
Boiler Tune up	0	15	0%	\$0.00	\$5,250	0%	0	36,210	0%
Steam Trap replacement	0	10	0%	\$0.00	\$750	0%	0	2,030	0%
Total	8,114	7,925	102%	\$238,407	\$268,400	89%	608,550	630,740	96%

#### Table 17 Direct Install Program Results

### **Program Year 4 Changes**

The boiler tune ups and steam trap replacements were not successful in Program Year 3 and have been temporarily discontinued as a measure for Program Year 4. WECC is re-evaluating the marketing and outreach strategy for these measures and plans to re-introduce them later in the year. For the Direct Installation measures, WECC will continue to target property management companies and building owners to encourage participation.

## Residential Retrofit Ramp-up (Better Buildings) Pilot: INHP Eco-House Project and Near East Neighborhood Sweeps Program

### **INHP Eco-House Project**

The Indianapolis Neighborhood Housing Partnership (INHP) is currently offering the Eco-House Project, a low-interest loan program administered by INHP, to cover the costs of energy-efficient improvements to homeowners throughout Indianapolis. INHP selected WECC to serve as the program implementer of the Eco-House Project. As program implementer to INHP, WECC was responsible for the following:

- Home Energy Audits to customers marketed to by INHP with signed agreements and approved financing to implement energy efficiency recommendations.
- Home Weatherization Project Management Services to oversee implementation of the measures outlined in the work order defined by the customer and INHP.
- Incentive fulfillment for Citizens Gas air sealing/insulation measures selected by the customer.

Citizens Gas committed to offer incentives to the INHP Eco-House Project, with reserved funding for qualified building shell measures for air sealing and insulation. Citizens Gas funding would cover 50% of the air sealing/insulation measure installation, up to \$1,600 per home.

WECC provided administration and management of the Citizens Gas funding. WECC worked with INHP to reserve and track funding per project, as well as the rebate fulfillment services. INHP was responsible for providing WECC a reservation request of funds for the qualified air sealing/insulation measure projects. WECC was responsible for ensuring that each INHP project work order request and funding request met Citizens Gas requirements. WECC was responsible for approving and reserving of funding for each qualified home. At the conclusion of each project, WECC was responsible for administering payment of the incentive to the contractor.

### **Direct Install Program**

In addition to the insulation and air sealing incentives for Eco House, Citizens Gas in collaboration with Indianapolis Power & Light Company provided funding to cover the costs of direct install measures that include the installation of Compact Fluorescent Lamps (CFLs) measures (funded by IPL) and low flow water measures (funded by Citizens Gas) in each participating home. This direct install would occur at the final inspection and would include the installation up to eight (8) CFLs, one (1) 1.5 GPM showerhead, and up to three (3) aerators (kitchen and bath).

Additionally, Citizens Gas in collaboration with IPL, provided funding to cover the same direct install measures as described above (Eco House project) for the Near East Neighborhood Sweeps Program, a weatherization program funded by the City of Indianapolis, which WECC was also selected to manage. The Sweeps program includes pre- and post-retrofit audits/inspections and weatherization/retrofits costing up to \$1,500 per residential structure, including equipment and labor, to cover measures recommended in the audit. The program goals include audit and retrofits of a total of 800 homes in the Near Eastside between May 2011 and May 2013.

There were no incentives paid or direct installs made (both Eco House and Sweeps) during Program Year 3. This is because in spite of several retrofit projects being in progress for both Sweeps and Eco-House, the projects had not yet reached completion and thus the customers were not yet eligible for incentives or direct install measures as of August 31, 2011.

## **Residential On-Line Energy Assessment with Kit Program**

The Residential On-Line Energy Assessment with Kit program is a joint program between Citizens Gas and Indianapolis Power and Light Company designed to offer energy saving incentives to customers that use either the Citizens Gas Energy Savers On-Line program or the IPL's On-line Home Energy Inspector program. These on-line assessment tools are designed to assist and educate consumers on their home energy use and identify potential areas where they can take action to reduce their energy consumption. Consumers who visit these areas on the companies' websites will be sent an Energy Efficiency Kit. Each co-branded kit contains a low-flow showerhead, low-flow faucet aerators and compact fluorescent lamps (CFLs). The IPL and Citizens online home assessment program is open to all on-line residential customers. The IPL online assessment tool is currently offered as separate online energy assessment and operates independently through a contract between the utility and their selected provider. The Citizens Gas online assessment tool and the information presented by Citizens will provide education on how a how a customer's energy costs compare to other homes in the area, educate consumers on their home energy use, and identify potential areas where they can take action to reduce their energy consumption. Armed with this information, consumers are better equipped to make informed decisions in managing their consumption and consequent energy costs.

### **Program Results**

The initial goal for Program Year 3 was to deliver a total of 2,400 co-branded kits. Due to additional targeted marketing efforts and high customer demand, an additional 1,575 cobranded kits were added to the program goal for a total Program Year 3 goal of 3,975. Program Year 3 results for the Citizens Gas portion of the program are presented in the table below.

Measures	Participation	Goal	% to Origina I Goal	Incentive Budget	Incentive Budget	% to Total Goal	Est. Net Therm Savings Achieved	Est. Net Therm Savings Goal	% to Original Goal
Co-Branded Energy Efficiency Kits	2,366	3975	60%	\$55,908	\$108,999	51%	180,618	286,056	63%

#### Table 18 Residential On-Line Energy Assessment with Kit Program Results

### **Goal Attainment**

After the first 8 months of the program year, the program was tracking to exceed the initial goal of 2,400 co-branded kits and it was decided that adding an additional 1,575 kits would be attainable by the end of the Program Year 3. For the first 8 months of the program IPL sponsored both radio and print advertising that promoted their On-Line program with both programs. Of the first 2,400 kits that were ordered, 66% came from IPL customers. During the last few months of the program there was notably less promotion of the program by both utilities. It was also noted later in the program year that the Citizens Gas online tool (Aclara) may not have been working properly and thus the program may have been missing out on

customers that had taken the assessment and were not recorded as doing so, and thus not getting a kit.

### **Changes for Program Year 4**

Citizens Gas customers will complete an on-line registration and take the Citizens Home Energy Challenge to learn how to save energy in their home. Citizens Gas will collect the customer information directly and provide WECC with the mailing lists. Additionally, greater marketing efforts, i.e., the use of Val Pak mailing, will be utilized to reach more customers and heighten the awareness of the program in Program Year 4.

## **Multi-family Efficient Equipment Pilot**

The program was designed to affect the installation of high efficiency, natural gas-fueled space and water heating equipment in those dwellings units within a multifamily dwelling unit that are individually metered for natural gas. Additionally, the pilot program attempted to influence a market segment that traditionally considers the lowest first cost, rather than lifecycle operating costs, when making purchasing decisions. Finally, this pilot program would deliver energy efficiency services to an underserved ratepayer market segment (tenant) that traditionally does not participate in the decision to purchase energy efficient equipment.

The program has targeted both new construction and existing multi-family dwelling units with units individually metered for natural gas.

The program offers a new construction track and an existing building option. The owner/developer will have the option to receive the incentive as a rebate or elect to have it attributed to the equipment provider/contractor as a buy-down. In order to control volumes and prevent oversubscription, WECC implemented a process by which funds must be reserved for these "projects" prior to implementation.

### **New Construction**

The new construction track includes an incentive of \$325 for package 1 and \$505 for package 2 (please note that the text in Amendment A incorrectly listed the incentive for package 2 as \$425). The two options consist of space and water heating equipment, a space conditioning control device (presently programmable thermostats), and end-use energy saving water fixtures.

### **Existing Buildings**

The existing building market will be provided an incentive of \$175 for the replacement of an existing natural gas furnace with a 92% AFUE (or greater) natural gas forced air furnace. It will also provide a \$35 incentive for the installation of energy saving water fixtures including a 1.5 gallons per minute (gpm) showerhead, 1.5 gpm kitchen aerator, and 1.0 gpm bath aerator, and a \$20 incentive for a programmable thermostat.

This program was not officially approved until July 2011 which made finding eligible projects very difficult with the time that remained in Program Year 3. Most potential projects either had already been started with equipment already installed or projects had a start/end date that went beyond the Program Year 3 end of August 31, 2011. Consequently, there were no participants in this program during Program Year 3. As a result of our marketing and recruiting efforts in Program Year 3, several potential projects have been identified and targeted for Program Year 4 participation.

## **Support Services**

WECC provided the administrative services listed below in support of the programs, as outlined in our contract:

- Subcontractor management
- Call center support
- Budget tracking
- Fulfillment services
- Accounting services
- Enforcement customer service standards
- Data tracking systems
- Onsite verification of incentive claims
- Problem resolution
- Technical support to specify eligible equipment
- Reporting to Citizens Gas and its Oversight Board

WECC verified that each product for which incentives were paid met the prescribed efficiency standards referencing third party databases (e.g. ENERGY STAR, GAMA, and ARI). Products that could not be verified using a credible third party database were reviewed on a case-by-case basis and verified by a qualified engineer.

WECC staff also conducted onsite inspections of 2% of equipment for which customers received incentives to verify (1) products were indeed installed and (2) model and serial numbers match those provided on the incentive claim. This service is primarily used to prevent fraud. For PY 3, there were not any instances of fraud detected. Table 19 summarizes the number of verifications; more detail is available in the scorecard, provided in Appendix 1.

#### **Table 19 Equipment Verifications**

Equipment Verifications	Number of Inspections	% of Measures Implemented
Residential Prescriptive	71	2.36%
General Service Prescriptive	3	1.94
Total	74	2.34%

WECC provided call center support for the energy efficiency program portfolio. The Citizens Gas contact center also received a number of calls regarding the programs. Citizens Gas call center representatives, new business representatives and management staff responded to general questions regarding the program offerings. If the customers contacting Citizens Gas had inquiries that required more in-depth responses, a "hot" transfer option was made available.

Table 20 provides the number of calls and mailing requests received by the WECC contact center and the number of inquiries the Citizens Gas contact center received.

#### Table 20 WECC Contact Center

Location	Type of Contact	Program Year 3
WECC Contact Center	Calls Received	720
	Requested Mailing	188
Citizens Gas Contact Center	Calls Received	147

## Conclusion

Overall, the portfolio achieved net savings of 2.03<sup>2</sup> million therms which:

- Exceeded the original net therm planning goal of 1.735<sup>2</sup> million.
- Exceeded the PY2 estimated net therm savings of 1.74<sup>2</sup> million by nearly 200,000 therms.
- Was less than the revised planning goal of 2.458<sup>2</sup> million net therms (including Amendments A and B).

The following programs exceeded their original net therm saving goal: Residential and General Service Prescriptive, Residential Low Income Weatherization, Multi Family Direct Install and Residential Online Assessment with Kit.

From an expense perspective, the program invested \$2,817,722 in efficiency programs, which was less than the total budget (including Amendment A and B) of \$3,961,669.

The programs were highly cost effective, delivering over \$4 million in net benefits at a TRC of 2.6. The overall benefit cost results compare favorably to the operating plan values of \$1.87 million in net benefits and a TRC of 1.7.

<sup>&</sup>lt;sup>2</sup> Includes savings from Citizens Gas administered programs (Elementary Education and Low Income Working Poor) which had not yet been included in the Operating plan when it was initially completed. Does not include increased therm savings goal for online kits which was increased after operating plan was issued.

## Appendix 1. August Scorecard



#### Citizens Gas Energy Savers Program Year 3 (September 1, 2010 through August 31, 2011)

August 2011 - FINAL Month 12 of 12

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			Maxmaran In	nplemented	Pro	yram Perjan	mance Scoreca			Gross Th	erm Savinge		Net There	Swings	
Measures	Endnotes	Current Month	Character Street or	C. COMPANY COMPANY	% to Geal	Current Month	Pregram YTD	Planning Goal	% to Goal	Current Month		<b>Current Month</b>	Program YTD	Planning Goal	% to Goal
Residential Presentipitre Furnace 92% APUE	412	99	2.421	2,840	85%	\$19,800	\$484,200	\$569,900	85%	8,415	205,785	4.208	102,803	121.083	85%
Thermostat - Below Incentive	5 1	0	2	1,290	101%	\$0	\$40	\$25,800	101%	0	70	0	35	22,575	155%
Water Heater62 EF (12/10 - 04/11)	1. 1.	72	1,306 383	100512-0		\$1.440	\$26,120 \$38,260	1 18-118-1500	antist (	2,620	45,710	1,858	34,997 5,822	Contract ()	
Water Heater62 EF Less than incentive	5	Ő	1	ଟମ	57%	50	\$90	\$67,700	67%	0	19	0	15	10,290	57%
Water Heater62 EF Lass than incentive Water Heater62 EF (05'11 - 04'12) Water Heater67 EF (05'11 - 04'12)	10 AN 1		36	123	29% 58%	\$400 \$460	\$1,800	\$4,150 \$2,850	20%	162	684 437	122	§47 387	1,470	29%
Water Heater - Tankless, 82 FF	6	0	126	140	90%	\$1,350	\$18,000	\$21,000	90%	702	0,795	442	6,161	5,460	113%
Water Heater - , 86 TE Boller 90%, AFUE	1. 200	0	0	8	0%	50	\$0 \$14,000	\$1,200	0% 127%	0	1,876	0	0	512 1,179	127 %
New Furnace Dealer		0	0	72	0%	50	\$0	\$3,600	0%			- 0		1,000	
Subtonal		101	4,314	5,200	87%	\$23,440	\$585,060	\$7.06,100	87%	11,900	271,623	6,736	162, 357	163,637	90%
<=70 ES Certified Index Gas Heat <=70 ES Certified Index (Johr Program)	1	0	- A - 1	15	87%	- 90	\$750	\$10,689	87%	0	416	0	303	4,992	8%
<=70 ES Cartified Index (Joint Program)		0	12		1 101 1	50	\$8,550			0	4,092	0	3,094		
>70 and - 85 ES Certified Index Gas Heat >70 and - 85 ES Certified Index (Joint Program)	2	0	13	15	87%	50	\$0	\$7,125	87%	- 0	2,601	0	2,018	2,329	87%
ESV or 3D		0	0	34	0% 76%	\$0	\$0 \$16,475	\$2,850	75%	0	0 8.099	0	6.345	0.495	75%
Subtotal General Service Prescription	10.00	-	- 20	34	76%		\$15,475	1 120,005	79%		8,000		6,945	0,495	75%
Furnace 92% AFUE Unit Heater 01% EF		0	89	208	\$2%	\$0	\$17,800	\$41,600	52%	0	10,135	0	9,568	22,360	63%
Thermostat - Below Incentive		0		266	68%	10	\$4,200	\$5.320	68%		4,515	*	2,258	5,054	68%
Thermostat - Standard Incentive		0	181	10.00	12.000	50	\$3,620	1 0 1 0 0 0 0 0 0 0	100000-001	0	6,678	0	3,439	1 Con 1	
Water Heater62 EF (12/10 - 04/11) Water Heater62 EF (09/11 - 06/12)	1	0	8	1	0%	90	80	\$400 \$50	0%	0	0	0	0	61	0%
Water Heater67 EF (05'11 - 04'12)	Q	0	ō	1	0%	\$0	\$0	\$150	0%	0	0	ŏ	0	35	0%
Water Heater - Tarkless, .82 EF Water Heater68 TE	5	0	21	40	53%	50	\$3,150 \$600	\$6,000 \$1,200	\$2% \$0%	0	1,638	0	1,310	2,496	53% 50%
Boller 60% AFUE		0	41	65	63%	\$0	\$198,850	\$162,500	122%	0	330,807	ő	264,645	133,120	100%
Boter Ture Up - Below Incentive Boter Ture Up - Standard Incentive	0.10	0	2	225	26%	10	\$0 \$14,500	\$56,250	26%	3.072	234.034	2.458	0	397,990	47%
Micculating Boller Control	-	0	8	6	133%	\$900	\$15,075	\$15,000	101%	0	45,360	0	36,288	5,530	656%
		0	0	6	124%	\$0	\$0 \$1,500	\$1,500	124%		5,278	0	0	5,630	124%
Steam Trap / Service Buydown Low Row Pre-Rines Sprayer	2	1	20	10	10%	\$25	\$25	\$250	10%	432	432	346	4,222	3,410	10%
Low How Pre-Hinse Sprayer - Outreach	10	3	103	103	100%	1141	\$4,829	\$4,829	100%	1,296	44,496	1.296	44,496	44,496	100%
Subicial	ACCURATE AND	_	563	964	57%	1000	\$263,040	\$296,099	89%	4,800	694,972	4.000	\$55,718	627,383	80%
Initial Audit	7	15	133	87	153%	\$6,000	\$34,400	\$17,400	108%			-		1.1.1.000	47%
Air Seal. / Ins. Gas Homes w/o Central AC Air Seal. / Ins. Gas Homes w Central AC	2		75	53 69	47%	\$42,047	\$75,540 \$164,338	\$103,648 \$137,025	73%	2,065	7,375	2.065	7,375	16,635	109%
Final Audit / Heinspections	7	· · · · · · · · · · · · · · · · · · ·				54,975	\$19,538			1		2	Si 22		·
Defensis Subtotal	1 7	22	293	209	111%	\$0 \$53,922	\$3,100	\$258.073	115%	2.065	29.500	204	29,500	35,990	62%
Multi Family Program	12	12202 - 10	and the second second	C contract 1	A PROPERTY	Sector Sector Sector	and the second second	and a standard and a	i line all	N. 112022-0	all all and a	THE WAYNES AT	and Sugar	1 Dente San	1 - 131
Units Completed Boller Turne-Up	20 A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.	5.887	8,114	7,900	103%	\$174,602	\$238,407	\$262,400	01%	441.525	606,550	441,525	606,55.0	592,500	103%
Steam Trap / Service Buydown	<u> </u>	Ö	ŏ	10	0%	\$0	\$0	\$750	0%	Ö	ő	ŏ	0	2,030	0%
Subtotal Multi Family Etholent Equipment Point	12	£.887	8,114	7,925	102%	\$174,692	\$238.407	\$268,400	80%	441,525	608,550	441,525	608,550	630,740	66.6
New Construction Track		1	2	6	a - 8			35	1 - 3						a. 2
High Efficiency Equipment Package (Furnace, Water Heater, Programable Thermostat, Showerhead, Aerators)															
Heater, Programable Intermostat, Showerhead, Alerators)		. 0	0	100	0%	80	\$0	\$32,500	0%	0	0	0	0	19,400	0%
Rinnai Hot Water Heat with Hydronic Boiler (Programmable			0		1.000		1000	-	1000			÷			
Thermostat, Showethead, Aeratore)		0	0	100	6%	\$0	80	\$60,500	0%	0	0	0	0	23,600	0%
Mass Retrofit Funats				160	0%			\$17,500	0%					4,100	0%
Subiotal	÷	0	ő	300	0%	30	10	\$100,500	0%		0		ů ů	47,300	0%
Better Buildings Program An Sex / Inc (San Homas w/ Central Act	12				0%	10 K		\$88,000	0%	-		Sec. S		17,105	0%
Air Sea. / Ins. Gas Homes w/o Central AC	6	0	ő	46	0%	90	80	\$72,000	0%	0	0	ő	0	13,995	0%
Cirect Instal Kits		0	0	406	0%	\$0	\$0	\$6,224	0%	0	0	Ö	0	30,450	0%
Subtotal Gamaral Represent - Cureture		0	0	506	0%	90	40	\$166.224	0%		0		0	61,550	0%
Projects < 7,500 Therms	0	0	2	14	14%	\$0	\$2,944	\$26,068	11%	0	3,925	0	2,944	26,166	11%
Projects >=7,500 Therms. Subjortal	10	4	12	24	50% 37%	\$54,255 \$54,255	\$179,530 \$182,474	\$346,392 \$372,460	52% 49%	58,115	240,824 244,749	43,586 43,586	180,618	286,056	63%
Residential Online Energy Assessment Kit	12	100	and the second	dillo -	3				- 200	10011000 - 10		1910		The Manual State	- 3 A - 1
Low Flow Measures	-	0	2,366	4.474	53%	\$0	\$55,908	\$108.000	51%	0	255 528	0	204,422	283.608	72%
Total WECC Administered Portfolio Total		6,110	15,620	10,650	79%	\$305.074	\$1,638,507	\$2,300,517	71%	\$18,405	2113.021	498,011	1,740,454	2,170,924	00%
		ŏ	_		_	-		-	_						-
Elementary Education Program Kits	4	0	3,123	2,050	102%	80	\$06,250 \$19,750	\$06,250 \$28,750	100%	0	97,906	0	97,906	175,670	56%
Energy Action in Schools	11	4	30	30	100%	\$0			60%	199.366	195,366	189,366	120,366	180,366	100%
Subicial Low Income Working Four Weatherization		-	3,153	3,080	102%	80	\$116,000	\$125.000	03%	180.366	287,272	189,366	287,272	364,436	79%
U / Working Poor Weatherization		23	23	22		\$165,465		\$165,000		6,795	6,785	6,786	6,785		100%
Total Program Perticise Total	-		5 5 Acri	2231112	876	5 Trail 10 13	1 1.020 062 35	5 2.535 F16 42	1000	714,554	2.407.078	694-162	2.034.511	2.543.148	2016



#### **Citizens Gas**

**Energy Savers Program Year 3** 

(September 1, 2010 through August 31, 2011)

August	2011	- F	IN	AL.
	Month	12	of	12

#### **Channels and Contacts**

Clur Month	YTD
0	3
75	1337
4	00
5	15
84	1443
	75 4 5

Outtomers	23	300
Home Buildem	5	99
HVAC & Plumbing Contractors	20	270
Commercial	0	0
Total Contacta	49	719

TSI		
Home Builders	0	225
Builder Mailings	0	1,279

Modia / Other Outreach Activities TSI

MilHomes

Aimon

Company or Organization

30 Custom Builder Monthly E-Mails w/ Estar Updates Attended Multilamily Estar Green Conference (500 attendees)

WECC		
Company or Organization	Date	Attendees
B & B Energy Inc	06'10'11	25
B & B Energy Inc	08/11/11	25
B & B Energy Inc	08'16'11	15
B & B Energy Inc	06/19/11	15
ASHARE Seminar	06/24/11	30
B & B Energy Inc	06/25/11	25

quipma	nt Verificationa	Man	aures :	Ineg	ections
	Туре	YTD	2%	YTD	% Varified
3840	Femace 92% AFUE	2,421	48	53	2%
3834 6225 6225 3834	Water Heater62 EF (12/10 - 04/11)	384	e.	13	3%
62.23	Water Heater62 EF (05/11 - 04/12)	36	1		0%
6220	Water Heater67 EF (05/11 - 04/12)	11	0	0	0%
3836	Water Heater - Tankless, 82 EF	126	3	4	3%
5115	Water Heater88 TE	0	0	8	0%
3834	Boller 90% AFUE	28	<u> </u>	S 10	4%
385	Femace 92% AFUE	89	2	2	2%
3854	Water Heater62 EF (12/10 - 04/11)	0	0	0	-0%6
6273	Water Heater62 EF (09/11 - 09/12)	0	0		0%
6274	Water Heater67 EF (05/11 - 04/12)	0	0	0	0%
3855	Water Heater - Tankless, .82 EF	21	0		0%
3853	Water Heater88 TE	4	0	0	0%
3847	Boller 90% AFUE	-41	1	1	2%
58.3	Tetal Varifications	3,161	64	74	2%
-	"Until the February Scorecard, the YTD mean	ures above ve	re only picking	up the MTD.	
er Inco	ma Pregram Audita	Cite	ntity		Cost
	A REAL PROPERTY AND A REAL				

ANA TERMINANA AND	Cur Mon	TD	CurMon	TTD
Initial	15	133	\$6,000	\$34,400
598 Final	12	93	\$4,975	\$19,538
Defemals	0	27	80	\$3,100
134 Reinspections	0	0	\$0	\$0
435 Cests	27	253	\$10,975	\$57,038

Website Traffic

Date Attendees

.

50

06/01/11

08/25/11

	Darge Service	enne ditta negas dans	affaliaiter www.clifteragos.comé.ab.atea	
Month	PageLoads	Unique Visitions	Auge Louds	Sits que Viators
September	107	87	293	244
October	209	240	829	730
November	1,110	948	603	456
December	1,782	1,540	939	767
January	1,710	1,427	562	447
February	1,090	924	448	364
March	496	410	423	317
April	224	176	566	412
May	157	138	426	339
June	143	112	339	272
July	395	265	353	289
August	367	256	435	346

#### 13285 Program Basics 13286 Parler to Staff 5 202 13307 Audit Program waitist 0 2 Calls Received 30 532 \*Customer inquiry about last years program 13816 Res Appliance/Rebates New Construction Mailings 6 188 720 WECC Totals 36 Citizens Gas Customer Service Business Contact Center 5 35 1 112 Total Citizens Gas Contacts 11 147

Cur Month

25

YTD

328

#### astern F

mer Call Canter Contacts

WECC- Calle

Contraction of the Institution o	
Beginning Balance of Projects in Current Month	21
Projects added	3
Less Projects paid	4
Less Projects dropped from consideration	1
Ending Balance of Projects in the Pipeline	20

rejants Paid	Armt Pd	Thurma	Men Pd
St. Andrews United Methodist Church	\$1,350	1,800	Sep-10
Central Supply	\$7,836	7,836	Sep-10
Butler University - Invin Library	\$25,000	38,600	Dec-10
K & KJ Enterprises	\$1,594	2,125	Dec-10
Dimplex North America	\$22,331	22,331	Jan-11
Roche Diagnostics Building B	\$11,634	11,634	Fab-11
Roche Diagnostics Building E	\$12,846	12,046	Fab-11
Peerless Pump	\$25,000	68,934	Map-11
Grocer's Supply	\$13,671	13,071	May-11
Grocer's Supply	\$8,357	8,357	May-11
Butler University - Gallahue Hall	\$25,800	28,860	Aug-11
Developer Town	\$12,258	12,258	Aug-11
Altec Industries (2Accounts)	\$16,997	16,997	Aug-11
Tota	\$182.474	244,749	



#### Citizens Gas Energy Savers Program Year 3 (September 1, 2010 through August 31, 2011)

#### August 2011 - FINAL Month 12 of 12

### Endnote Reference Guide

Scorecard	#	Comments
Nov 2010	1	Unit Heater with 91% EF was left off of the October scorecard where it should have been noted that there had been a receipt of 21 for an incentive payment of \$4,200 and gross therm savings of 4,515 therm savings and net savings of 2,258.
Dec 2010	2	November scorecard showed \$20,000 as MTD expenditures as a place holder for the anticipated invoice. When the invoice arrived, the amount was \$5,859.74 less therefore the YTD expenditure amount has been reduced by this amount on December's scorecard and retroactively in the data.
Jan 2011	3	Attribution rate has been corrected from 70% to 100%.
Jan 2011	4	Final report indicated 73 additional participants than originally reported. Therm Savings goal was based on results from last school year. There was a significant decrease in the number of homes reporting natural gas water heat this year (52% vs. 79%) which accounts for the lower therm savings.
Feb 2011	5	Customer purchased water heater at less than incentive cost due to employee discount.
Feb 2011	6	Attribution rate has been corrected from 80% to 50% plan to keep program savings in alignment with budget and participation burn.
Apr 2011	7	Final Audits / Reinspections and Deferrals have been unbundled from the Initial Audits to clearly represent those efforts in recruitment for the Low Income Weatherization Program vs. those final costs which are a necessity for wrapping up each residential project or placing the home into a status (Deferral) for later participation. There are no goals nor savings for these items independent of those associated with the actual weatherization work.
Apr 2011	8	The December Boiler Tune-up was adjusted to use a savings methodology that incorporated Indiana specific heating degree days. Originally reported savings: 2379.3 Gross / 1903.44 Net Therms, New Therm Savings: 2143.533 Gross / 1714.8264 Net Therms, Reduction 235.767 Gross / 188.6136 Net Therms
May 2011	9	Prior to May the customers avoided costs for 2009-2010 were being used in the calculation, rather than the customer avoid costs for 2010-2011
Jul 2011	10	Outreach Pre-Rinse Sprayer kits that were installed in June were not entered into the system until July. These numbers were not reported in the monthly section of the June scorecard but are reflected in the YTD on the July scorecard.
Jul 2011	11	Four additional schools participated in the program and were included in the savings report from NEF.
Jul 2011	12	All planning goals have been updated per Amendment A & B as approved by the Oversight Board in July.

Citizens Gas

Energy Savers Program Year 4 (September 1, 2011 through August 31,2012)

August 2011 - FINAL Month 12 of 12

#### Portfolio Budget

	Program	Original Program Budget		vised Program Budget mendment A) July 2011	(A	Additional Funding mendment B) August 2011	Final PY 3 Budget including nendments A and B	Acti	PY 3 ual Spending	S (Revi	Carryover pending ised Budget tual Spend)
1.10	Residential Prescriptive *	\$ 712,070	\$	812,070	\$	-	\$ 812,070	\$	648,628		
1.20	Residential New Construction *	\$ 61,093	\$	61,093	\$	2	\$ 61,093	\$	41,362	i. S	
1.30	Residential Low-Income Wx	\$ 210,001	\$	260,001	\$	44,455	\$ 304,456	\$	333,308	\$	123,308
1.40	Multi Family Direct Install	\$ 198,585	\$	198,585	\$	109,100	\$ 307,685	\$	248,524	\$	49,939
1.50	Residential Online Assessment w/Kit	\$ 82,532	\$	120,950	\$	11,000	\$ 131,950	\$	67,854		
1.70	Residential Retrofit Ramp-up PILOT	\$ 200,000	\$	220,000	\$	2	\$ 220,000	\$	4,162		
1.80	Multifamily Efficient Equipment Pilot	\$	\$	117,000	\$	-	\$ 117,000	\$	700	95 10	
2.10	General Service Prescriptive	\$ 260,058	\$	410,058	\$	8	\$ 410,058	\$	333,787	\$	73,729
2.20	General Service Custom	\$ 511,962	\$	511,962	\$	-	\$ 511,962	\$	245,656	92 92	
	Sub Total	\$ 2,236,300	\$	2,711,718	\$	164,555	\$ 2,876,273	\$	1,923,981		
	Support Services		2 12		а. 					5 5	
3.00	Program Administration	\$ 398,815	\$	398,815	\$	-	\$ 398,815	\$	170,904		
4.00	Marketing & Consumer Education	\$ 287,953	\$	287,953	\$	æ	\$ 287,953	\$	263,564	2	
5.00	Evaluation	\$ 120,000	\$	120,000	\$	-	\$ 120,000	\$	105,191		
	Sub Total	\$ 780,321	\$	806,768	\$	41	\$ 806,768	\$	539,659		
	NEF Budget	\$ 125,000	\$	125,000	\$		\$ 125,000	\$	125,950		
	Low Income	\$ 165,000	\$	165,000	\$	æ	\$ 165,000	\$	165,465	\$	465
	Sub Total	\$ 290,000	\$	290,000	\$	-	\$ 290,000	\$	291,415	\$	1,415
	Total Budget	\$ 3,306,622	\$	3,808,486	\$	164,555	\$ 3,973,041	\$	2,755,056		
	Total PY2 Carryover Spend in PY3		8		8		i.			\$	248,856

Unallocated Funds	\$ 31,078
Remaining Program Year 2 Carryover funds	\$ 449,013
Program Year 3 Carryover	\$ 800,050

### Appendix 2: Cost Benefit Analysis – Citizens Gas Only Programs

Input Output Report

Citizens Gas Program Year 3 Results

	3			Inpu	t Values						Summary Resu	alts	
	kWH .	kW	Therms	Incr Cost	Life	Free Rider %	Participants	Incent. %	Budget \$	Budget %	Net Ben	TRC	Utilit BC
1 Residential - Prescriptive									\$1,911,055	100%	\$4,075,093	2.6	3.
T Residential - Prescriptive													
Admin Allocation Costs							1		\$22,212	1%	\$22,212		
Evaluation Allocation Costs							1		\$45,913	2%	-\$45,913		
Implementation Costs - Res Prescriptive			(blank)				1		\$163,422	9%	-\$163,422		
Mktg Allocation Costs							1		\$92,247	5%	-\$92,247		
.62 or Higher EF Water Heater (12/10 - 4/11)			19	\$1	150 13	20	384	67%	\$38,350	2%	-55,431	0.9	1
.62 or Higher EF Water Heater (5/11 - 4/12)			19	\$1	150 13	20	36	33%	\$1,800	0%	-\$509	0.9	2
.67 EF Water Heater (5/11 - 4/12)			37	\$3	800 13	5	11	50%	\$1,650	0%	-\$442	0.9	1
88% TE Water Heater			80	\$2	250 7	20		60%	\$0	0%	\$0		
90% AFUE Boiler - Existing - Residential			67	\$3	500 20	20	28	100%	\$14,000	1%	\$4,522	1.4	1.
92% AFUE Furnace - Replace Existing	733		85	\$6	5 <b>50</b> 15	50	2421	31%	\$484,200	.25%	\$422,793	1.5	2
ENERGY STAR Thermostat - Replace Existing	328		35	្ន	<b>50</b> 13	23	1308	40%	\$26,160	1%	\$327,654	7.5	14.
New HVAC Dealer SPIFF									50	0%	\$0		
Tankless Water Heater82 EF			78	58	800 20	37	126	19%	\$18,900	1%	-54,471	0.9	3.

Analysis uses same assumptions as CG PY3 planning (5.68 / therm yr round 5.75 per therm heating) to facilitate a comparison between programs as planned and programs as delivered.

witcontin energy conservation corporation				Input \	/alues				-		Summary Resu	ults	
	kWH	kW	Therms	Incr Cost	Life	Free Rider %	Participants	Incent. %	Budget \$	Budget %	Net Ben	TRC	Utility BC
1.7 Residential - Retrofit Ramp-up Pilot													
Admin Allocation Costs							1		\$0	0%	\$0		
Evaluation Allocation Costs							1		\$1,169	0%	-\$1,169		
Mktg Allocation Costs							1		\$0	0%	\$0		
Air Sealing/Insulation Gas Homes w/CAC	1076		311	\$3,20	0 30			50%	\$0	0%	\$0		
Implementation Costs							1		\$4,162	0%	-\$4,162		
Air Sealing/Insulation Gas Homes no CAC	1059		311	\$3,20	0 30			50%	\$0	0%	\$0		
CG - Direct Install (gas only)- Res			75	\$1	57			100%	\$0	0%	\$0		
1.7 Residential - Retrofit Ramp-up Pilot Total									\$5,332	0%	-\$5,332		

wittentin energy conservation corporation				Input	Values				_		Summary Resu	lts	
	kWH	kW	Therms	Incr Cost	Life	Free Rider %	Participants	Incent. %	Budget \$	Budget %	Net Ben	TRC	Utility BC
.8 Multi-family Equipment Pilot													
Water Heater Tankless Hydronic Study (Thermostat,													
Aerator DI)	600		238	\$1,35	3 16			37%	\$0	0%	\$0		
New Construction New Construction Track (Furnace, Water Heater, Prog. Thermostat, Showerhead,											2		
Aerators)			194	\$85	0 15			38%	\$0	0%	\$0		
Heating Mass Retrofit - Furnace Replacement			41	\$60	0 20			29%	\$0	0%	\$0		
Admin									\$700	0%	-\$700		
1.8 Multi-family Equipment Pilot Total									\$700	0%	-\$700		

			Input Valu	les			_		Summary Resu	ılts	
kW	/H kW	Therms	Incr Cost Lif	Free Ri le %	ider Participants	Incent. %	Budget \$	Budget %	Net Ben	TRC	Utili BC
Commercial - Prescriptive											
(blank)											
Low Flow Pre Rinse Sprayers - Outreach		432	\$65 5		103	72%	\$4,829	0%	\$129,861	20.4	2
Admin Allocation Costs					1		\$3,511	0%	-\$3,511		
Evaluation Allocation Costs					1		\$19,621	1%	-\$19,621		
							10000000000				
Implementation Costs - Com Prescriptive					1		\$69,839	4%	-\$69,839		
Mktg Allocation Costs					1		\$39,535	2%	-\$39,535		
.62 or Higher EF Water Heater (12/10 - 4/11)		19	\$150 13	20		67%	0	0	0		
.62 or Higher EF Water Heater (5/11 - 4/12)		19	\$150 13	20		33%	\$0	0%	\$0		
.67 EF Water Heater (5/11 - 4/12)		37	\$300 13	5		50%	0	0	0		
.82 EF Water Heater Tankless		78	\$700 20	20	21	21%	\$3,150	0%	\$774	1.1	
88% TE Water Heater		600	\$3,000 7	20	4	5%	\$600	0%	-\$1,632	0.8	
90% AFUE Boiler - Existing - Commercial		8068.46	\$12,800 20	20	41	38%	\$198,850	10%	\$2,352,534	6.6	
92% AFUE Furnace - Replace Existing		215	\$650 15	50	110	31%	\$22,000	1%	\$64,946	2.8	
Boiler Modulating Burner Control (min 5:1)		5670	\$8,500 15	20	8	22%	\$15,075	1%	\$254,612	5.7	
Boiler Reset Control (retrofit)		1152.08	\$250 15	20		100%	\$0	0%	\$0		
Boiler Tune Up - Commercial		4035.07	\$350 2	20	58	71%	\$14,500	1%	\$249,121	16.3	
ENERGY STAR Thermostat - Replace Existing		38	\$50 13	50	181	40%	\$3,620	0%	\$21,705	5.8	
Low Flow Pre Rinse Sprayers		432	\$65 5	20	1	38%	\$25	0%	\$1,009	20.4	
Steam Trap Buy Down		203	\$75 7	20	26	67%	\$1,300	0%	\$17,632	12.3	

38

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WEECC wisconsin energy conservation corporation				Inpu	t Values						Summary Resu	ilts	
	kWH	kW	Therms	Incr Cost	Life	Free Rider %	Participants	Incent. %	Budget \$	Budget %	Net Ben	TRC	Utility BC
5. Low Income/Working Poor Weatherization (blank) LI/Working Poor Weatherization			295	\$7,1	<b>94</b> 30		23	100%	\$165,465	9%	-\$73,990	0.6	0.6
5. Low Income/Working Poor Weatherization Total									\$165,465	9%	-\$73,990	0.6	0.6

	3 <del>.</del>			inpu	t Values				35		Summary Resu	ults	
	kWH	kW	Therms	Incr Cost	Life	Free Rider %	Participants	incent. %	Budget \$	Budget %	Net Ben	TRC	Utility BC
. NEF - School Education Program													
Elementary Education Program Kits	(blank)		31		531 7		3123	100%	\$96,250	5%	\$310,079	4.2	4.
Energy Action in Schools Implementation Costs	(blank) (blank)		6312.2	\$	558 7		30 30	100%	\$19,750 \$318,250	1% 17%	\$766,156 -\$298,500	39.8	39.
. NEF - School Education Program Total									\$434,250	23%	\$777,735	2.9	2.

### Appendix 3: Cost Benefit Analysis – Citizens Gas & IPL Joint Programs

Input Output Report

Citizens Gas PY3/IPL PY1 Program Results

				Input	Values						Summary Result	5	
	kWH	kW	Therms	Incr Cost	Life	Free Rider %	Participants	Incent. %	Budget \$	Budget %	Net Ben	TRC	Utility
PY1 - CG PY3									\$2,490,001	100%	\$7,128,339	2.6	4.6
Residential - New Construction													
CG - Admin Allocation Costs							1		\$159	0%	-\$159		
CG - Evaluation Allocation Costs							1		57,273	0%	-\$7,273		
CG - Mktg Allocation Costs							1		\$26,356	1%	-\$26,356		
CG - Implementation Costs - Res New											44.01000		
Construction							1		\$25,887	1%	-\$25,887		
CG - NC-Cert. ES HERS Score 70		(blan)	416	\$3,32	5 30	20	13	22%	\$9,300	0%	\$23,748	1.7	6.
CG - NC-Cert. ES HERS Score 85	(blank)	(blan	207	\$1,42	<b>15</b> 30	25	13	33%	\$6,175	0%	\$10,951	1.8	4.0
CG - NC-Cert. ES Sgl. Fam. Home Version 3.0	(blank)	(blan	4309	\$3,50	0 30	5		20%	\$0	0%	50		
IPL - Implementation Costs - Res New Construction ES Plus							1		\$29,329	1%	-\$29,329		
IPL-ECM Motor on HVAC	1072	0.05		\$40	0 20			25%	\$0	0%	50		
IPL -ES Certification < 70 gas heat	310	0.1		\$17	5 30		13	21%	\$488	0%	\$1,438	1.6	7.
IPL-ES Certification < 85 electric heat	4155	0.3		\$1,50	0 30		31	33%	\$15,500	1%	\$28,667	1.6	4.8
IPL-ES Certification < 85 gas heat	152.5	0.05		\$7	5 30		15	33%	\$375	0%	\$999	1.9	5.
IPL-ES Certification <70 electric heat	7337.5	0.5		\$3,50	0 30		2	21%	\$1,500	0%	\$1,484	1.2	5.
IPL -ES Ver 3.0 (baseline IECC 2009) electric													
heat	4809	0.5		\$5,05	0 30			15%	\$0	0%	50		
IPL-ES Ver 3.0 (baseline IECC 2009) gas heat	191	0.1	(blank)	\$18	<b>10</b> 30			21%	50	0%	50		
IPL -Evaluation - Allocation							1		\$0	0%	\$0		
IPL -Heat Pump Water Heater	2873	0.3		\$70	0 15			71%	\$0	0%	50		

Analysis uses same assumptions as CG PY3/IPL PY1 planning (\$.68 / therm yr round \$.75 per therm heating) to facilitate a comparison between programs as planned and programs as delivered.

				Input	Values						Summary Result	5	
	kWH	kW	Therms	Incr Cost	Life	Free Rider %	Participants	incent. %	Budget \$	Budget %	Net Ben	TRC	Utility BC
IPL-SEER AC from 13 to 15minimum Bonus (all gas NC homes)	294	0.2		\$50	0 20			40%	\$0	0%	\$0		
IPL-SEER HP from 13 to 15minimum Bonus (all electric NC homes)	1082	0.2		\$1,00	0 20		2	20%	\$400	0%	-\$762	0.6	3.1
1.2 Residential - New Construction Total									\$123,212	5%	-\$22,949	0.9	1.4

	1 <u>5</u>			Input	Values			12	-		Summary Results	ŝ.	
	kWH	kW	Therms	Incr Cost	Life	Free Rider %	Participants	Incent.	Budget \$	Budget %	Net Ben	TRC	Utility BC
Res - Low Income Weatherization													
(blank)													
CG - Initial Audit Costs	(blank)		(blank)	\$25	9 (blank)		133	100%	\$34,400	1%	\$0		
CG - Admin Allocation Costs							1		\$0	0%	50		
CG - Evaluation Allocation Costs							1		\$10,110	0%	-\$10,110		
CG - Mktg Allocation Costs							1		SO	0%	50		
CG - Implementation Costs - Res Targeted									1572/		1576		
Wx							1		\$35,984	1%	-\$35,984		
CG - Weatherize Single Family Home Gas													
Heat no CAC			295	\$3,03	8 30		25	100%	\$75,949	3%	\$23,480	1.3	1.3
CG - Weatherize Single Family Home Gas													
Heat w/CAC			295	\$2,19	1 30		75	100%	\$164,338	7%	\$133,951	1.8	1.8
IPL -Evaluation - Allocation							1		\$0	0%	50		
IPL -Mktg/Consumer Ed - Allocation							1		\$1,587	0%	-\$1,587		
IPL - Implementation Costs -Low Income							1		\$42,304	2%	-\$42,304		
IPL -Electric Heat Homes Shell no CAC	1503	0.03		\$3,83	1 30		19	100%	\$72,795	3%	-\$58,143	0.2	0.2
IPL-Electric Heat Homes Shell w/ CAC	1449	0.03		\$1,88	3 30		56	100%	\$105,448	4%	-\$63,732	0.4	0,4
IPL-Gas Heat Homes Shell no CAC	1059	0.01		\$43	2 30		24	100%	\$10,356	0%	\$2,324	1.2	1.2
IPL -Gas Heat Homes Shell w/ CAC	1076	0.05		\$51	3 30		75	100%	\$38,442	2%	\$5,851	1.2	1.7
IPL-Audit Cost					7		202		\$46,646	2%	\$0		

# WECC

kWH         kW         Therms         Incr Cost         Life         %         Participants         %           Residential Online Energy Assessment w/kit         CG - Implementation Costs - Res Energy         1         \$9,481         0%         9           Assessment         1         \$9,481         0%         9         9         9         9           CG - Implementation Costs - Res Energy         1         \$13,178         1%         -5         9         9         -5         9         9         -5         -5         9         9         53         7         20         2366         100%         \$972         0%         \$14         -5         1         52,458         1%         -5         -5         10         1         \$22,458         1%         -5         16         90         0%         \$14         -5         1         52,458         1%         -5         16         50         0%         \$16         -5         16         50         0%         51         1         52,458         1%         -5         16         1         52,458         1%         -5         16         16         16         16         16         16         16         16         1					Inp	ut Values				1		Summary Results	5	
CG - Implementation Costs - Res Energy         1         \$9,481         0%           Assessment         1         \$2,664         0%         5           CG - Mt/g/Consumer Ed - Allocation         1         \$2,664         0%         5           CG - Evaluation - Allocation         1         \$2,2664         0%         5           CG - Energy Kits - Cost Only         \$27 7         20         2366         100%         \$63,172         3%         5           CG - Energy Kits - Cost Only         \$108         7         20         2366         100%         \$63,172         3%         55           VPL Implementation Costs - Res Energy         108         7         20         2366         \$00         \$51,00           IPL - Energy Kits - (4 CFL) Savings Only         204         0.04         7         2366         \$00         \$51,00           IPL - Energy Kits - (4 CFL) Savings Only         204         0.04         7         2366         \$00         \$51,00           IPL - Energy Kits - Cost Only         \$1         (blank)         \$27,70         100         432         100%         \$7,808         \$0%           IPL - PLONLY Energy Kits - Cost Only         \$1         \$100%         \$17,963         \$6         \$51 </th <th></th> <th>kWH</th> <th>kW</th> <th>Therms</th> <th>Incr Cost</th> <th>Life</th> <th></th> <th>Participants</th> <th></th> <th>Budget \$</th> <th>Budget %</th> <th>Net Ben</th> <th>TRC</th> <th>Uti B</th>		kWH	kW	Therms	Incr Cost	Life		Participants		Budget \$	Budget %	Net Ben	TRC	Uti B
Assessment       1       \$9,481       0%         CG = Evaluation - Allocation       1       \$2,664       0%         CG = Energy Kits - Cost Only       \$27       20       2366       100%       \$63,172       3%       5%         CG = Energy Kits - Cost Only       108       7       20       2366       50       0%       \$1,07         CG = Energy Kits - Low Flow Savings Only (gas       108       7       20       2366       \$00       \$1,07         VH         108       7       20       2366       \$00       \$1,07       \$	antial Online Energy Assessment w/kit													
CG - Evaluation - Allocation       1       \$2,664       0%         CG - Energy Kits - Cost Only       \$27 7       20       2366       100%       \$63,172       3%       5         CG - Energy Kits - Low Flow Savings Only (gas       108       7       20       2366       100%       \$63,172       3%       5         WH)       108       7       20       2366       100%       \$63,172       3%       5         IPL - Implementation Costs - Res Energy       108       7       20       2366       \$00       \$51,075         Assessment       1       \$22,458       1%       .5	Implementation Costs - Res Energy													
CG - Mktg/Consumer Ed - Allocation       1       513,178       1%       -5         CG - Energy Kits - Cost Only       527       20       2366       100%       563,172       3%       -5         CG - Energy Kits - Low Flow Savings Only (gas WH)       108       7       20       2366       100%       563,172       3%       -5         CG - Energy Kits - Low Flow Savings Only (gas WH)       108       7       20       2366       50       0%       51,6         PL - Implementation Costs - Res Energy       108       7       20       2366       50       0%       51,6         PL - Energy Kits - (4 CFL) Savings Only       204       0.04       7       2366       50       0%       51         IPL - Energy Kits - (4 CFL) Savings Only       204       0.04       7       2366       50       0%       51         IPL - Energy Kits - Cost Only       51       (blank)       52 7       100       432       100%       57,808       0%       64         IPL - Energy Kits - Cost Only       [PL - Evaluation - Allocation       51       (blank)       52 7       4611       100%       5117,963       5%       54         IPL - IPL ONLY Energy Kits - Cost Only       (blank)       52 7								1		\$9,481	0%	-\$9,481		
CG - Energy Kits - Cost Only       \$27 7       20       2366       100%       \$63,172       3%       <	Evaluation - Allocation							1		\$2,664	0%	-\$2,664		
CG - Energy Kits - Low Flow Savings Only (gas WH)         108         7         20         2366         S0         0%         51,6           IPL - Implementation Costs - Res Energy Assessment         1         522,458         1%         5           IPL - Energy Kits - (4 CFL) Savings Only         204         0.04         7         2366         \$0         \$6         \$1           IPL - Energy Kits - (4 CFL) Savings Only         204         0.04         7         2366         \$0         \$6         \$53           IPL - Energy Kits - (4 CFL) Savings Only         204         0.04         7         2366         \$00         \$53           IPL - Energy Kits - (4 CFL) Savings Only         204         0.04         7         2366         100%         \$972         0%           IPL - Energy Kits - Cost Only         51         (blank)         \$2 7         100         432         100%         \$7,808         0%         50         0%         51           IPL - Energy Kits - Cost Only         (blank)         \$25 7         4611         100%         \$117,963         \$6         54           IPL - IPL ONLY Energy Kits - Low Flow Savings         0.067         7         4611         \$00         0%         54           IPL - IPL ONLY Energ	Mktg/Consumer Ed - Allocation							1		\$13,178	1%	-\$13,178		
WH)         108         7         20         2366         \$0         95         95         95           IPL - Implementation Costs - Res Energy Assessment         1         522,458         1%         -5           IPL - Energy Kits - (4 CFL) Savings Only         204         0.04         7         2366         \$0         9%         51           IPL - Energy Kits - (4 CFL) Savings Only         204         0.04         7         2366         \$0         9%         53           IPL - Energy Kits - (4 CFL) Savings Only         51         (blank)         52 7         100         432         100%         \$972         0%         53           IPL - Energy Kits - Cost Only         51         (blank)         52 7         100         432         100%         \$7,808         0%         54           IPL - Energy Kits - Cost Only         51         (blank)         526 7         4611         100%         \$117,963         5%         53           IPL - IPL ONLY Energy Kits - Low Flow Savings         0.067         7         4611         100%         \$117,963         5%           IPL - IPL ONLY Energy Kits - Low Flow Savings         0.067         7         4611         \$0         9%         54           IPL - IPL ONL	Energy Kits - Cost Only					\$27 7	20	2366	100%	\$63,172	3%	-\$50,538		
IPL - Implementation Costs - Res Energy Assessment       1       522,458       1%       -5         IPL - Energy Kits - (4 CFL) Savings Only       204       0.04       7       2366       \$0       \$5         IPL - Energy Kits - (4 CFL) Savings Only       204       0.04       7       2366       \$00%       \$5         IPL - Energy Kits - Cost Only       51       (blank)       \$2 7       100       432       100%       \$972       0%         IPL - Energy Kits - Cost Only       51       (blank)       \$2 7       100       432       100%       \$7,808       0%         IPL - Energy Kits - Cost Only       (blank)       \$2 57       100       431       100%       \$117,963       5%       -\$1         IPL - IPL ONLY Energy Kits - Cost Only       (blank)       \$25 7       4611       100%       \$117,963       5%       -\$1         IPL - IPL ONLY Energy Kits - Low Flow Savings       0.067       7       4611       \$00       0%       54         IPL - IPL ONLY Energy Kits - Low Flow Savings       0.067       7       4611       \$0       0%       54         IPL - IPL ONLY Energy Kits - Low Flow Savings       0.067       7       4611       \$0       0%       54	Energy Kits - Low Flow Savings Only (gas													
Assessment       1       522,458       1%       -5         IPL - Energy Kits - (4 CFL) Savings Only       204       0.04       7       2366       \$0       0%       51         IPL - Eco CFL Installation       51       (blank)       52 7       100       432       100%       \$972       0%       51         IPL - Energy Kits - Cost Only IPL - Evaluation - Allocation       51       (blank)       52 7       100       432       100%       \$7,808       0%       51         IPL - IPL ONLY Energy Kits - Cost Only IPL - IPL ONLY Energy Kits - Cost Only       (blank)       525 7       4611       100%       \$117,963       5%       5%         IPL - IPL ONLY Energy Kits - Low Flow Savings Only (elec WH)       464.1999566       0.067       7       4611       50       0%       54         IPL - IPL ONLY Energy Kits - Low Flow Savings       464.1999566       0.067       7       4611       50       0%       54	1000.5370.000.000.000.000.000.000.5000.000.500 			108		7	20	2366		\$0	0%	\$1,004,945		
IPL - Energy Kits - (4 CFL) Savings Only       204       0.04       7       2366       \$0       \$0       \$1         IPL - Eco CFL Installation       51       (blank)       \$2 7       100       432       100%       \$972       0%       51         IPL - Energy Kits - Cost Only IPL - Evaluation - Allocation       53 7       2366       100%       \$7,808       0%       51         IPL - IPL ONLY Energy Kits - Cost Only       (blank)       \$25 7       4611       100%       \$117,963       5%       -51         IPL - IPL ONLY Energy Kits - Low Flow Savings       664.1999566       0.067       7       4611       50       0%       54         IPL - IPL ONLY Energy Kits - Low Flow Savings       664.1999566       0.067       7       4611       50       0%       54         IPL - IPL ONLY Energy Kits - Low Flow Savings       664.1999566       0.067       7       4611       50       0%       54	Implementation Costs - Res Energy													
IPL - Eco CFL Installation       51       (blank)       52 7       100       432       100%       \$972       0%         IPL - Energy Kits - Cost Only IPL - Evaluation - Allocation       \$3 7       2366 1       100%       \$7,808 50       0%         IPL - IPL ONLY Energy Kits - Cost Only IPL - IPL ONLY Energy Kits - Cost Only       (blank)       \$26 7       4611       100%       \$117,963       \$%       -\$1         IPL - IPL ONLY Energy Kits - Low Flow Savings Only (elec WH)       464.1999566       0.067       7       4611       \$0       \$0       \$4         IPL - IPL ONLY Energy Kits - Low Flow Savings       0.067       7       4611       \$0       \$0       \$4         IPL - IPL ONLY Energy Kits - Low Flow Savings       0.067       7       4611       \$0       \$0       \$4	ssment							1		\$22,458	1%	-\$22,458		
IPL - Energy Kits - Cost Only IPL - Evaluation - Allocation       \$3 7       2366 1       100%       \$7,808 \$0       0%         IPL - IPL ONLY Energy Kits - Cost Only       (blank)       \$26 7       4611       100%       \$117,963       \$%       -\$1         IPL - IPL ONLY Energy Kits - Low Flow Savings Only (elec WH)       464.1999566       0.067       7       4611       \$0       \$0       \$4         IPL - IPL ONLY Energy Kits - Low Flow Savings       0.067       7       4611       \$0       \$4       \$4         IPL - IPL ONLY Energy Kits - Low Flow Savings       0.067       7       4611       \$0       \$4       \$4	Energy Kits - (4 CFL) Savings Only	204	0.04			7		2366		\$0	0%	\$122,580		
IPL - Evaluation - Allocation         1         \$0         0%           IPL - IPL ONLY Energy Kits - Cost Only         (blank)         \$26 7         4611         100%         \$117,963         \$%         -\$1           IPL - IPL ONLY Energy Kits - Low Flow Savings Only (elec WH)         464.1999566         0.067         7         4611         \$0         0%         \$4           IPL - IPL ONLY Energy Kits - Low Flow Savings         0.067         7         4611         \$0         0%         \$4           IPL - IPL ONLY Energy Kits - Low Flow Savings         0.067         7         4611         \$0         0%         \$4	Eco CFL Installation	51		(blank)		\$2 7	100	432	100%	\$972	0%	\$0		
IPL - IPL ONLY Energy Kits - Cost Only       (blank)       \$26 7       4611       100%       \$117,963       5%       -\$1         IPL - IPL ONLY Energy Kits - Low Flow Savings       464.1999566       0.067       7       4611       \$0       0%       \$4         IPL - IPL ONLY Energy Kits - Low Flow Savings       464.1999566       0.067       7       4611       \$0       0%       \$4         IPL - IPL ONLY Energy Kits - Low Flow Savings       6611       \$0       \$6	Energy Kits - Cost Only					\$3 7		2366	100%	\$7,808	0%	-\$7,808		
IPL - IPL ONLY Energy Kits - Low Flow Savings           Only (elec WH)         464.1999566         0.067         7         4611         \$0         0%         \$4           IPL - IPL ONLY Energy Kits - Low Flow Savings         7         4611         \$0         0%         \$4	Evaluation - Allocation							1		\$0	0%	\$0		
Only (elec WH)         464.1999566         0.067         7         4611         \$0         0%         \$4           IPL - IPL ONLY Energy Kits - Low Flow Savings         50         0%         \$4         54         54	IPL ONLY Energy Kits - Cost Only		(blank)			\$26 7		4611	100%	\$117,963	5%	-\$117,963		
IPL - IPL ONLY Energy Kits - Low Flow Savings	IPL ONLY Energy Kits - Low Flow Savings	l C												
	(elec WH)	464.1999566	0.067			7		4611		\$0	0%	\$492,834		
Co.L. (and 1997)														
0% 108 7 50 0%	(gas WH)			108		7				50	0%	50		
IPL - Mitg/Consumer Ed - Allocation 1 \$4,008 0%	Mktg/Consumer Ed - Allocation							1		\$4,008	0%	-\$4,008		

		Input Values				-	Summary Results						
	kWH	kW	Therms	Incr Cost	Life	Free Rider %	Participants	Incent. %	Budget \$	Budget %	Net Ben	TRC	Utility BC
Multi Family Direct Install													
CG - Admin Allocation Costs							1		\$0	0%	\$0		
CG - Evaluation Allocation Costs							1		\$495	0%	-\$495		
CG - Mktg Allocation Costs							1		\$0	0%	\$0		
CG - Implementation Costs - Mult. Family D	1						1		\$0	0%	\$0		
CG - Boiler Tune up			2414	\$5	600 7			70%	\$0	0%	\$0		
CG - Steam Trap			203	\$1	00 7			75%	\$0	0%	\$0		
CG -Kit - Installation (joint w/IPL)				-	26		8114	100%	\$210,315	8%	-\$210,315		
IPL -Evaluation - Allocation							1		\$0	0%	\$0		
IPL -Mktg/Consumer Ed - Allocation							1		\$35,655	1%	-\$35,655		
CG - Multi Family DHW Direct Install - Com IPL - Implementation Costs - Multi Family			75		\$8 7		8114	100%	\$64,912	3%	\$2,460,689	38.9	38.9
Direct Install							1		\$6,946	0%	-\$6,946		
IPL -Kit - CFLs	51	0.01			\$4 7		50502	100%	\$217,681	9%	\$436,431	3.0	3.0
IPL -Kit - Installation (IPL Only)				1	22		6902	100%	\$153,000	6%	-\$153,000		
IPL -Kit - Installation (joint w/Citizens Gas)					\$6			39%	\$0	0%	\$0		
IPL - Kit-Bath Aerator	264.5	0.019	(blank)		\$1 7		7243	100%	\$3,622	0%	\$374,283	104.4	104.4
IPL - Kit - Kitchen Aerator	154.5	0.019	(blank)		\$2 7		6902	100%	\$11,698	0%	\$223,542	20.1	20.1
IPL - Kit -Showerhead	500	0.058	(blank)		\$4 7		6915	100%	\$24,203	1%	\$727,516	31.1	31.

	Input Values						-		Summary Results			
kWH	kW T	Therms	Incr Cost	Life	Free Rid %		Incent. %	Budget \$	Budget %	Net Ben	TRC	Utility BC
						1		\$2,358	0%	-\$2,358		
						1		\$17,751	196	-\$17,751		
						1		\$19,767	1%	-\$19,767		
Custom						1		\$63,182	3%	-\$63,182		
	1	1962.5	\$7,4	48 15	25	2	20%	\$2,944	0%	\$13,896	2.2	8.5
	7	20068.7	\$57,7	32 15	25	12	26%	\$179,530	7%	\$1,018,471	3.0	8.6
						1		\$0	0%	\$0		
1						1		\$19,964	1%	-\$19,964		
ustom						1		\$124,652	5%	-\$124,652		
289754.7857	130.9		\$85,8	93 15		14	18%	\$215,106	9%	\$1,610,445	2.3	13.1
19470.45833	6.019		\$25,4	46 15		24	8%	\$50,599	2%	-\$343,560	0.4	5.3
•	Custom 1 ustom 289754.7857	Custom 2 ustom 289754.7857 <b>130.9</b>	Custom 1962.5 20068.7 stom 289754.7857 <b>130.9</b>	Custom 1962.5 \$7,4 20068.7 \$57,7 ustom 289754.7857 <b>130.9</b> \$85,8	Custom 1962.5 \$7,448 15 20068.7 \$57,732 15 a ustom 289754.7857 130.9 \$85,893 15	kWH kW Therms Incr Cost Life %	Lustom 1 1962.5 \$7,448 15 25 2 20068.7 \$57,732 15 25 12 1 1 1 289754.7857 130.9 \$85,893 15 14	kWH         kW         Therms         Incr Cost         Life         %         Participants         %           Custom         1	kWH         kW         Therms         Incr Cost         Life         %         Participants         %         Budget \$           1         \$2,358         1         \$17,751         \$17,751         \$19,767           1         \$1962.5         \$7,448 15         25         2         20%         \$2,944           20068.7         \$57,732 15         25         12         26%         \$179,530           1         \$19,964         \$1         \$19,964         \$1         \$124,652           289754.7857         130.9         \$85,893 15         14         18%         \$215,106	kWH         kW         Therms         Incr Cost         Life         %         Participants         %         Budget \$         Budget \$         Budget \$           custom         1         \$2,358         0%         1         \$17,751         1%           1         \$63,182         3%         1         \$63,182         3%           1         \$63,182         3%         1         \$63,182         3%           1962.5         \$7,448         15         25         2         20%         \$2,944         0%           20068.7         \$57,732         15         25         12         26%         \$179,530         7%           1         \$10         \$10,964         1%         \$10,964         1%         \$10,964         1%           289754.7857         130.9         \$85,893         15         14         18%         \$215,106         9%	kWH         kW         Therms         Incr Cost         Life         %         Participants         %         Budget \$         Budget \$         Budget \$         Budget \$         Net Ben           1         \$2,358         0%         -\$2,358         1         \$17,751         1%         -\$17,751           1         \$1962.5         \$7,448         15         25         2         20%         \$2,944         0%         \$13,896           20068.7         \$57,732         15         25         12         26%         \$179,530         7%         \$1,018,471           1         50         0%         \$00         1         \$19,964         1%         -\$19,964           atsom         289754.7857         130.9         \$85,893         15         14         18%         \$215,106         9%         \$1,610,445	kWH         kW         Therms         Incr Cost         Life         %         Participants         %         Budget \$         Budget \$         Budget \$         Net Ben         TRC           1         \$2,358         0%         -\$2,358         1         \$17,751         1%         -\$17,751         -\$17,751         1%         -\$17,751         1%         -\$17,751         -\$18,000         -\$19,0767         -\$19,0767         -\$19,0767         -\$19,0767         -\$10,000         \$13,896         2.22         20%         \$2,944         0%         \$13,896         2.22         2.0068,7         \$57,732         15         25         2         20%         \$2,944         0%         \$13,896         2.22         2.0068,7         \$51,018,471         3.0         3.0         3.0         \$0         0%         \$0         3.0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$10         \$124,652         \$%         \$51,014,451         2.3           289754.7857         130.9         \$85,893         14         18%         \$215,106         9%         \$1,610,445         2.3         \$1,610,445         2.3 </td

		Input Values					_	Summary Results					
3 Program Administration	wн	kW	Therms	Incr Cost	Life	Free Rider %	Participants	Incent. %	Budget \$	Budget %	Net Ben	TRC	Utility BC
Support Costs - Administration (unallocated) (	blank)		(blank)				1		\$62,350	3%	-\$62,350		
3 Program Administration Total									\$62,350	3%	-\$62,350		
Grand Total								_	\$2,490,001	100%	\$7,128,339	2.6	4.6

## Appendix 4: Mid Year Program Portfolio Summary

	Measures	Implemented	Budget Ex	penditures	Net Therm Savings	
Measures	Planning Goal	Revised Planning Participation	Planning Goal	Revised Planning Budget	Planning Goal	Revised Net Savings
Residential Prescriptive						
92% AFUE Furnace	844	2,915	\$168,800.00	\$583,000.00	35,870	123,888
Programmable Thermostat	586	1,367	\$11,720.00	\$27,340.00	10,255	23,923
.62 EF Water Heater	247	998	\$24,700.00	\$99,800.00	3,162	12,774
.82 EF Water Heater - Tankless	71	115	\$10,650.00	\$17,250.00	2,769	4,485
.88 EF Water Heater	20	8	\$3,000.00	\$1,200.00	1,280	512
90% AFUE Boiler	6	17	\$3,000.00	\$8,500.00	322	911
Subtotal	1,774	5,420	\$221,870.00	\$737,090.00	53,658	166,493
Residential - New Construction				-		
ES Cert - 85	25	25	\$12,500.00	\$12,500.00	3,881	3,881
ES Cert -70	25	5	\$18,750.00	\$3,750.00	8,320	1,664
ES rating to plans	10	5	\$800.00	\$400.00		
Subtotal	60	35	\$32,050.00	\$16,650.00	12,201	5,545
General Service Prescriptive				-		
92% AFUE Furnace	53	53	\$10,600.00	\$10,600.00	5,698	5,698
Programmable Thermostat	91	30	\$1,820.00	\$600.00	1,729	570
.62 EF Water Heater	30	10	\$3,000.00	\$1,000.00	384	128
.82 EF Water Heater - Tankless	22	7	\$3,300.00	\$1,050.00	858	437
90% AFUE Boiler	30	30	\$75,000.00	\$75,000.00	61,440	61,440
Boiler Tune -Up	121	183	\$30,250.00	\$45,750.00	214,025	323,690

	Measures	Implemented	Budget Ex	cpenditures	Net Therm Savings					
Measures	Planning Goal	Revised Planning Participation	Planning Goal	Revised Planning Budget	Planning Goal	Revised Net Savings				
Boiler Mod Burner Cntrl	4	2	\$10,000.00	\$5,000.00	3,686	1,843				
Boiler Reset Control (Retrofit)	4	2	\$1,000.00	\$500.00	3,686	1,843				
88% TE Water Heater	4	2	\$600.00	\$300.00	1,920	960				
91% EF Unit Heaters	10	5	\$2,000.00	\$1,000.00	1,075	538				
Steam Trap/Service Buydown	20	10	\$1,000.00	\$500.00	3,248	1,624				
Low Flow Pre-Rinse Sprayer	9	3	\$225.00	\$75.00	3,110	1,037				
Subtotal	398	337	\$138,795.00	<b>\$141,375.00</b>	300,859	399,808				
Residential Low Income Program										
Homes Completed	158	158	\$578,944.00	\$578,944.00	14,852	14,852				
Multi Family Program					·					
Units Completed	10,000	7,200	\$70,000.00	\$50,400.00	750,000	540,000				
Boiler Tune -Up	25	20	\$8,750.00	\$7,000.00	60,350	48,280				
Steam Trap Replacement	15	10	\$1,125.00	\$750.00	3,045	2,030				
Subtotal	10,040	7,230	\$79,875.00	\$58,150.00	813,395	590,310				
Residential Retrofit Program Year 1 C	arryover			-						
Air Sealing and Insulation Jobs	79	107	\$143,180.35	\$164,430.14	30,020	40,660				
Subtotal	79	107	\$143,180.35	\$164,430.14	30,020	40,660				
Residential Walkthrough Audit Progra	am									
Audits	675	0	\$155,250.00	\$0.00						
Aerators	675	0	¢9,000,00	\$0.00	7,290	0				
Showerhead	675	0	\$8,000.00	\$0.00	31,590	0				
Subtotal	2,025	0	\$163,250.00	\$0.00	38,880	0				

	Measures	Implemented	Budget Ex	penditures	Net Therm Savings				
Measures	Planning Goal	Revised Planning Participation	Planning Goal	Revised Planning Budget	Planning Goal	Revised Net Savings			
General Service - Custom									
Projects < 7500 Therms	4	4	\$9,600.00	\$9,600.00	5,100	5,100			
Projects 7500 to 15000 Therms	6	18	\$45,000.00	\$135,000.00	33,750	101,250			
Projects >15,000 Therms	2	2	\$30,000.00	\$30,000.00	22,500	22,500			
Subtotal	12	24	\$84,600.00	\$174,600.00	61,350	128,850			
Total WECC Administered Portfolio	14,546	13,311	\$1,442,564.35	\$1,871,239.14	1,325,215	1,346,518			